

The `uantwerpendocs` classes^{*†}

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1 Introduction

This package implements the house style of Universiteit Antwerpen for course texts, master's theses, letters and implements a class to format exams (which is for efficiency reasons and ease of copying not fully UAntwerpen house style compliant). Using these class files will make it easy for you to make and keep your course texts and master's theses compliant to this version and future versions of the UAntwerpen house style.

If you think

- there's an error in compliancy w.r.t. the house style,
- there's a feature missing in this class file,
- there's a bug in this class file,

please, contact us through e-mail (walter.daems@uantwerpen.be). We'll provide you with an answer and if (and as soon as) possible with a solution to the problem you spotted.

Do you like these class files? You're welcome to send us beer, wine, or just kind words.

2 Synopsis

The `uantwerpencoursetext` and `uantwerpenmasterthesis` classes are an extension of the standard `LATEX book` class. They are intended to be used for writing course texts and master's theses. They provides a title page that is compliant

^{*}This document corresponds to `uantwerpendocs` 1.9, dated 2018/03/02.

[†]Thanks to Paul Levrie for testing and proofreading.

to the UAntwerpen house style, and they also typeset the rest of your document appropriately.

The `uantwerpenletter` class is derived from the standard `LATEX letter` class. It is intended to be used for writing business letters. It is compliant to the house style and allows for using windowed envelopes of the DL format, with right-aligned window.

The `uantwerpenexam` class is derived from the standard `LATEX article` class and is for efficiency reasons not fully UAntwerpen house style compliant.

They require (and use) the following packages:

- the `ifthen` package
- the `ifmtarg` package
- the `geometry` package
- the `atbegshi` package
- the `hyperref` package
- the `graphicx` package
- the `background` package
- the `color` package
- the `tikz` package
- the `fancyhdr` package
- the `pst-barcode` package
- the `auto-pst-pdf` package
- the `eso-pic` package

and optionally

- the `varioref` package.

So make sure these packages are available to your `LATEX` compiler.

3 Portability

This class file should be ready to use with all common `LATEX` compilers (PDF`LATEX`, `LATEX`, X_Y`LATEX`, Lua`LATEX`, ...) from the major `TEX`-distributions (TeX_{Live}, MikTeX). If you experience problems, please inform the author.

4 Usage

4.1 Basic Usage

Use the templates provided below. Remember to \LaTeX your source file twice in order to have the title and final page correctly aligned.

4.1.1 `uantwerpencoursetext` class

Use the following harness for your \LaTeX course text:

```
\documentclass[a4paper]{uantwerpencoursetext}

\usepackage{<include any packages you require here>}

\facultyacronym{<put your faculty's acronym here>}

\title{<put your title here>}
\subtitle{<put your subtitle here>}
\author{<put your name here>}

\courseversion{<put a version identifier here>}
\versionyear{<the publication date of the course here>}

\lecturer{<person teaching the course>}
\programme{<descriptor of first programme>}
\course{<course code>}{<name of the course>}%

\academicyear{<XXXX-YYYY>}

\begin{document}

    \maketitle

    % put your LaTeX code here

    \finalpage

\end{document}
```

The available faculty acronyms are listed in a table on page 7.

4.1.2 uantwerpenmasterthesis class

Use the following harness for your L^AT_EX master's thesis:

```
\documentclass[a4paper]{uantwerpenmasterthesis}

\usepackage{<include any packages you require here>}

\facultyacronym{<put your faculty's acronym here>}

\title{<put your title here>}
\author{<put your name here>}
\supervisorI{<put the first supervisor's name(s) here>}
\supervisorII{<put the first supervisor's name(s) here>}
\supervisorIII{<put the first supervisor's name(s) here>}
\supervisorIV{<put the first supervisor's name(s) here>}

% classmarker
\academicyear{<XXXX-YYYY>}

\begin{document}

    \maketitle

    % put your LaTeX code here

    \finalpage

\end{document}
```

The available faculty acronyms are listed in a table on page 7.

4.1.3 uantwerpenletter class

Use the following harness for your L^AT_EX letter:

```
\documentclass[a4paper]{uantwerpenletter}

% setup fonts according to your specific TeX compiler setup

\usepackage{<include any packages you require here>}

% \logo{} only specify if you want to use your unit's logo

\sender{<put your name here>}{<put your title/role here>}
\facultyacronym{<put your faculty's acronym here>}
\unit{<put your unit here>}
```

```

\address{<put your multi-line address here>}
\email{<user name>}{<domain name>}
\phone{<put your phone number here, start with +32>}
\fax{<put your fax number here, start with +32>}
\mobile{<put your mobile number here, start with +32>}
\returnaddress{<put your single-line return address here>}

\to{<name of the addressee goes here>}
\toorganization{<name of the organization goes here>}
\toaddress{<multi-line address of the addressee goes here>}

\date{<specify date - otherwise today>}
\subject{<specify subject>}

\begin{document}

    \maketitle % generates top of the letter

    \opening{Dear <name>}

    <write your letter here>

    \closing{Kind regards,}

    \carboncopy{<put CC people here>}
    \enclosed{<put reference to enclosed documents here>}

\end{document}

```

The available faculty acronyms are listed in a table on page 7. You may use lists in the `\carboncopy` and `\enclosed` commands. The spacing will be compact.

4.1.4 `uantwerpenletter` class

to be composed

4.2 The class options explained

The classes have several options. They are listed below. After every option, it has been indicated to which class the option applies (between square brackets, without prefix `uantwerpen`).

`copyright` [coursetext]

This option forces printing a watermark on every page. For the paper version of your document, this is inappropriate, but for any e-copy you make available, this may be appropriate;

filled [letter / coursetext / masterthesis / exam]
 This option causes the text to be filled (simultaneous left and right alignment). Though this setting is not recommended, it is provided because the default `\raggedright` cannot be undone. The **filled** option prevents the `\raggedright` from being issued. However, if you care about the readability of your text, you shouldn't use this option.

titlepagenoartwork [coursetext / masterthesis]
 This option forces the title pages to be typeset without circle graphics and logo. This allows for printing on a pre-printed color sheet that already contains circle graphics and logo;

titlepagetableonly [coursetext / masterthesis]
 This option forces the title-page data to be printed in table form as first page. Some publishers require the manuscript to be delivered in this form. They perform the entire typesetting of the title page.

qr [coursetext]
 This option allows you to generate a QR code containing the details of the course on the title page or the table-only title page. For this option to work, the package `pstricks` is loaded. It will not work with `pdfLATEX` unless you enable shell escape. Read your `pdfLATEX`-package documentation on how to do that.

examiner [exam]
 This option allows to set the exam class in examiner mode, mentioning the examiner mode on every page (as regular text in the header and also in a watermark) to make sure you never hand out that copy to students.

Common sets of options depend on the purpose:

- to make a text ready for electronic distribution: **a4paper**, **copyright**.
- to make a camera-ready text (for printing) in case the cover is printed on a pre-printed color artwork cover sheet is: **a4paper**, **qr**, **titlepagenoartwork**.
- to make a camera-ready text (for printing) in case the cover is typeset based on table data: **a4paper**, **qr**, **titlepagetableonly**.
- to make a letter: no options (filling a letter is discouraged)
- to make an exam: no options (filling an exam is discouraged)

4.3 The macros explained

4.3.1 Common macros

After every macro, it has been indicated to which class the macro applies (between square brackets), and whether it is mandatory or not.

`\facultyacronym` [coursetext / masterthesis / exam] (mandatory)
 This macro sets the acronym of the faculty. This macro also sets the faculty name according to the specified acronym. If you're missing a faculty or institute, please ask the author to complete the list.

The available acronyms are:

Acronym	Faculty name
ASoE	Antwerp School of Education
CPG	Centrum Pieter Gillis
FBD	Faculteit Farmaceutische, Biomedische en Diergeneeskundige Wetenschappen
GGW	Faculteit Geneeskunde en Gezondheidswetenschappen
IOB	Instituut voor Ontwikkelingsbeleid- en beheer
IOIW	Instituut voor Onderwijs- en Informatiewetenschappen
LW	Faculteit Letteren en Wijsbegeerte
OW	Faculteit Ontwerpwetenschappen
SW	Faculteit Sociale Wetenschappen
REC	Faculteit Rechten
TEW	Faculteit Toegepaste Economische Wetenschappen
TI	Faculteit Toegepaste Ingenieurswetenschappen
WET	Faculteit Wetenschappen

4.3.2 Macros for the coursetext and masterthesis classes

`\title` [coursetext / masterthesis] (mandatory)
 This macro sets the title of the document. It also sets the `pdftitle` tag of the hyperref package, so that the PDF-document meta-information is correct.

`\subtitle` [coursetext] (optional)
 This macro sets the title of the document. You may use this

- to further clarify the title
- to indicate the nature of this document

The latter is to be considered when you want to provide multiple documents as parts of the full course text (e.g., Course Notes, Formula Collection, Exercise Book, Solution Book). This macro also sets the `subject` tag of the hyperref package, so that the PDF-document meta-information is correct.

`\author` [coursetext / masterthesis] (mandatory)
 This macro sets the author of the document. It also sets the `pdfauthor` tag of the hyperref package, so that the PDF-document meta-information is correct.

`\publisher` [coursetext] (mandatory)

This macro sets the publisher information of the document. It is printed on the front page. It defaults to the repographic service of campus Groenenborger, one of the standard printing services of Universiteit Antwerpen.

`\publishercode` [coursetext] (mandatory)
 This macro sets the publisher code of the document. It is printed on the front page. This is code that the publisher uses for its internal administration. It may be a proprietary code, or an ISBN number.

`\courseversion` [coursetext] (optional)
 This macro indicates which version of the course this is.

`\versionyear` [coursetext] (mandatory)
 This is to be the year in which you published the current version of the course in the form YYYY.

`\lecturer` [coursetext] (mandatory)
 This is the name of the person that actually teaches the course (in Dutch: titularis). If there are multiple persons, please, use the macros `\lectureri`, `\lecturerii`, `\lectureriii`, `\lectureriv`.

`\programme` [coursetext / exam] (mandatory)
 This macro takes three arguments (for the time being, only applicable to the faculty of applied engineering):

- the type of the programme: BA, SP, VP or MA
- the domain of the programme: IW
- the qualifier of the programme: BK, CH, BCH, EM, EI

If you need more programme classes or qualifiers, ask the author to complete the available codes. Correct usage of the macro will result in error-free descriptions on your title page. You can overrule the standard descriptions, by specifying 'FREE' as first argument and a free text description as second, leaving the third one empty. However, we strongly advise against taking this route. Instead, ask the author to complete the available codes.

`\supervisor` [masterthesis] (mandatory)
 This is the name of the person that promotes the thesis. If there are multiple persons, please, use the macros `\supervisor i`, `\supervisor ii`, `\supervisor iii`, `\supervisor iv`.

`\course` [coursetext / exam] (mandatory)
 Code (first argument) and name (second argument) of the curriculum course this coursematerial or exam belongs to. The code should be of the form: TNNNFFFAAA, with:

Code	Explanation
T	a number indicating the type of programme (1 for Bachelor courses, 2 for Master courses , 5 for specific courses of preparatory programmes)
NNN	a number assigned by the Faculty's administration
FFF	the acronym of your Faculty, e.g., FTI
AAA	an alphanumeric code assigned by the Faculty's administration

An example of such a code: 1001FTIWIS, for the first-semester mathematics course of the Faculty of Applied Engineering.

For courses of the Faculty of Applied Engineering, the name should be of the form **x-YYYYYYYY** with **x** the number of the semester and **YYYYYYYY** the official name of the course.

In case the course's name contains accented characters, one should also provide a qr version, containing utf8-characters only. The macro for this purpose takes only one argument, i.e. the course's name! This is to avoid inconsistencies in the course codes.

- \academicyear** [coursetext / masterthesis] (mandatory)
Use this macro to specify the academic year in full, i.e. in the form **XXXX-YYYY**.
- \diploma** [masterthesis] (mandatory)
This must be the official title, in Dutch. To avoid errors, we chose to use specific codes, that will expand to the correct description. These codes are specific for the Faculty of Applied Engineering. If you want the author of the package to add codes for your faculty, just ask!

Code	Description (in Dutch!)
Faculteit Toegepaste Ingenieurswetenschappen	
MA-IW-BK	Master of Science in de industriële wetenschappen: bouwkunde
MA-IW-BCH	Master of Science in de industriële wetenschappen: biochemie
MA-IW-CH	Master of Science in de industriële wetenschappen: chemie
MA-IW-EI	Master of Science in de industriële wetenschappen: elektronica-ICT
MA-IW-EI-AE	Master of Science in de industriële wetenschappen: elektronica-ICT, afstudeerrichting, Automotive Engineering
MA-IW-EI-ICT	Master of Science in de industriële wetenschappen: elektronica-ICT, afstudeerrichting ICT
MA-IW-EM-AE	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Automotive Engineering
MA-IW-EM-AU	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Automatisering
MA-IW-EM-EM	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Elektromechanica
MA-IW-EM-EN	Master of Science in de industriële wetenschappen: Elektromechanica, afstudeerrichting Energie
Faculteit Toegepaste Economische Wetenschappen	
MA-TEW-HI	Master of Science in de toegepaste economische wetenschappen: handelsingenieur
MA-TEW-HIBI	Master of Science in de toegepaste economische wetenschappen: handelsingenieur in de beleidsinformatica
MA-TEW-EB	Master of Science in de toegepaste economische wetenschappen: economische beleid
MA-TEW-BK	Master of Science in de toegepaste economische wetenschappen: bedrijfskunde

<code>\defensedate</code>	[masterthesis] (mandatory) Date of the defense in Dutch, in the form 'month year', e.g. "juni 2012".
<code>\defenselocation</code>	[masterthesis] (optional) Location of the defense. Defaults to "Antwerpen".
<code>\copyrightnotices</code>	[coursetext] (optional) Use this macro to specify additional copyright notice messages to appear in the copyright notice on the bottom of page 2 of your course text.

4.3.3 Macros for the letter class

<code>\sender</code>	[letter] (mandatory) Description of the person writing the letter.
----------------------	---

- first argument: name of the person writing the letter
- second argument: title / role of the person

Newlines are not allowed in the arguments.

<code>\logo</code>	[letter] (optional) file name of an alternative logo to use. The file name must be the name of a file in the search path of type PDF. If this macro is not used, The default logo of the university will be used.
<code>\unit</code>	[letter] (optional) Name of the unit to which the person belongs. This can be a research group, a laboratory, an administrative division, etc. Newlines are allowed.
<code>\address</code>	[letter] (mandatory) Address of the sending unit (or faculty). This can be different from the return address. Newlines are allowed and encouraged.
<code>\email</code>	[letter] (optional) E-mail address of the sending person, or the administrative person tracking the letter. This must definitely be someone that can answer questions related to this letter.
	<ul style="list-style-type: none"> • first argument: user name • second argument: domain name
<code>\phone</code>	[letter] (optional) Phone number of the sending person. See also <code>\email</code> .
<code>\fax</code>	[letter] (optional) Probably facsimile is not used anymore, but anyway: fax number of the sending person. See also <code>\email</code> .
<code>\mobile</code>	[letter] (optional) Mobile phone number of the sending person. See also <code>\email</code> .
<code>\returnaddress</code>	[letter] (mandatory) This is a short return address (listed in small font on top of the destination address (such that it is visible in a windowed envelope (European format)). It should fit on a single line. Typically we list an acronym for the unit, a room number, a campus name and address. The goal is to get the undelivered letter back to the person that can take action accordingly.
<code>\to</code>	[letter] (mandatory) Name of the addressee. Newlines are allowed. Preferably name and role are split over two lines.
<code>\toorganization</code>	[letter] (optional) Name of the organization that employs the addressee.

<code>\toaddress</code>	[letter] (mandatory) Address of the addressee. Newlines are allowed. The address should fit on max. 3 lines.
<code>\date</code>	[letter] (optional) Date of the letter. If not specified today's date (at the time of running L ^A T _E X) will be used.
<code>\subject</code>	[letter] (mandatory) Short descriptive subject that describes the contents of the letter.
<code>\opening</code>	[letter] (mandatory) Opening address of the letter. E.g. 'Dear X,'.
<code>\closing</code>	[letter] (mandatory) Closing clause of the letter. E.g. 'Best regards,'.
<code>\signature</code>	[letter] (optional) Add a signature (in between the closing statement of the letter and the sender's name. This might be a text message or a picture of your signature.
<code>\carboncopy</code>	[letter] (optional) List of persons receiving a copy of this letter. Format at will.
<code>\enclosed</code>	[letter] (optional) List of enclosed documents. Format at will.

4.3.4 Macros for the exam class

<code>\exampart</code>	[exam] (mandatory) Description of the part of the course the exam covers. Often the evaluation of a course consists of multiple evaluation elements (e.g. a written exam, a portfolio defense and lab reports). Using this macro you can indicate the part this exam covers. E.g. it could be 'Written Exam' (to distinguish from the other parts 'portfolio defense' and 'lab reports').
<code>\course</code>	[exam] (mandatory) see description of <code>\course</code> macro on page 8.
<code>\author</code>	[exam] (mandatory) The author of the exam (may be multiple authors, separated by commas). On the title page, these will be labeled as 'Professor(s) - Titularis(sen)'.
<code>\programme</code>	[exam] (mandatory) see description of <code>\programme</code> macro on page 8.
<code>\academicyear</code>	[exam] (mandatory) Use this macro to specify the academic year in full, i.e. in the form XXXX-YYYY.
<code>\examgroupnumber</code>	[exam] mentions the group number (may be empty)

<code>\examdate</code>	specifies the date of the exam. We recommend the YYYY-MM-DD format, but you are free to chose your own coding scheme for dates. We advise against using UNIX epoch time, to avoid problems in the first semester exams in 2038.
<code>\examlength</code>	specifies the length of the exam in a unit of time, e.g. '4h'
<code>\tstart</code>	specifies the start time of the exam, preferable in the format 'HHhMM', e.g. '08h30'.
<code>\tend</code>	specifies the end time of the exam in a format identical to the one chosen for <code>\tstart</code> .
<code>\rooms</code>	specifies the rooms in which the exam will take place. This is useless info for the student, but may be of convenience for you as author or supervisor of the exam. Use UAntwerpen standard room designators, e.g. 'G.U.025' for room number 025, on the Groenenborgercampus in the U-building.
<code>\studentnr</code>	specifies the exam copy number. This will appear on every page of the exam, easing the reassembly of pages that do not contain any name. Moreover, it allows for blind correction as the student only writes his name ot he front page.
<code>\extrainfo</code>	specifies the extra information that appears on the back of the title page, regarding the materials that can be used during the examination and cautioning the students not to commit fraude.

4.4 Examples

4.4.1 uantwerpencoursetext

This example uses the `qr` option (that invokes the `auto-pst-pdf` package) so enable 'write18' or 'shell-escape' for your L^AT_EX compiler.

```
<*ct-example>
\documentclass[a4paper,11pt,oneside,openright,english,qr,copyright]{uantwerpencoursetext}

\usepackage[english,dutch]{babel}

\title{Z\'agen, zoeken en zuchten}
\qrtitle{Zâgen, zoeken en zuchten}
\subtitle{Cursusnota's}
\author{Walter Daems en Paul Levrie}

\courseversion{1.3}
\versionyear{2016}

\lectureri{Zoltan Zo\''ekers}
\qrlectureri{Zoltan Zoëkers}
\lecturerii{Siana Sigh}
\lectureriii{Zeger de Z\'ager}
```

```

\qrlectureriii{Zeger de Záger}

\facultyacronym{TI}
\programme{MA}{IW}{EI}
\coursei{2023FTIZZZ}{5-Zoekmachines in een zaagperspectief}
\courseii{2045FTIIII}{6-Zaagmachines in \'e\'en zuchtperspectief}
\qrcourseii{6-Zaagmachines in één zuchtperspectief}

\academicyear{2015-2016}

\publisher{Universiteit Antwerpen\\
  Cursusdienst en reprografie\\
  Campus Groenenborger, G.U.027\\
  Groenenborgerlaan 171\\
  2020 Antwerpen\\
  T +32 3 265 32 15\\
  F + 32 3 233 32 27\\
  E cursusdienst.cgb@uantwerpen.be}

\publishercode{C11111102}

\copyrightnotices{
  The graphics in this document have been typeset using \texttt{TikZ}.\
  This document has been \TeX-ed on a GNU/Linux workstation.
}

\begin{document}
\selectlanguage{dutch} % or english if your text is in English

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*[Inleiding]
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud exercitation ullamco laboris nisi ut
aliquip ex ea commodo consequat. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
pariatur. Excepteur sint occaecat cupidatat non proident, sunt in
culpa qui officia deserunt mollit anim id est laborum.

\chapter{Onzin voor dummies}

\section{Een beetje Cicero}

```

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

```
\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}
```

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

```
\section{En waartoe het geleid heeft}
```

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

```
\subsection{Herhaling}
```

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed

quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

\subsection{Begint vervelend te worden}

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

\newpage

\subsection{Begint echt vervelend te worden}

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

\chapter{Besluit}

\backmatter

\appendix

\chapter{Symbolen}

\chapter{Romeinse sprekers}

\chapter{Referentielijst}

\makefinalpage


```
\end{document}
</ct-example>
```

4.4.2 uantwerpenmasterthesis

```
<*mt-example>
\documentclass[a4paper,11pt,twoside,openright,english]{uantwerpenmasterthesis}

\usepackage[english]{babel} % or dutch if your text is in Dutch

\title{Minimax optimisatie voor performantieruimtemodellering}
\author{Bert Bibber}

\supervisorI{Prof. dr. ir. Kumulus (Universiteit Antwerpen)}
\supervisorII{Prof. dr. Hilarius Warwinkel (TNT-Bang, N.V.)}
\supervisorIII{ing. Piet Pienter (POM)}

\facultyacronym{TI}
\academicyear{2015-2016}
\diploma{MA-IW-EI-ICT}
\defenselocation{Antwerpen}
\defensedate{juni 2016}

\begin{document}

\maketitle

\frontmatter

\tableofcontents

\mainmatter
\chapter*[Inleiding]
Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do
eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad
minim veniam, quis nostrud exercitation ullamco laboris nisi ut
aliquip ex ea commodo consequat. Duis aute irure dolor in
reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla
pariatur. Excepteur sint occaecat cupidatat non proident, sunt in
culpa qui officia deserunt mollit anim id est laborum.

\chapter{Onderzoeksvraag}

\section{Een beetje Cicero}
Sed ut perspiciatis unde omnis iste natus error sit voluptatem
accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae
ab illo inventore veritatis et quasi architecto beatae vitae dicta
```

sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

```
\begin{equation}
e^{-j\pi} + 1 = 0
\end{equation}
```

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

```
\chapter{Literatuurstudie}

\chapter{Theoretische achtergrond}

\chapter{Eigen realisatie}

\chapter{Besluit}

\backmatter
\appendix

\chapter{Symbolen}
\chapter{Referentielijst}

\makefinalpage

\end{document}
</mt-example>
```

4.4.3 uantwerpenletter

Plain example

```
<*le-example>
\documentclass[a4paper]{uantwerpenletter}

% As a good UAntwerpen citizen, you would use the calibri font.
% As this only works for XeLaTeX or LuaLaTeX, we chose to include
% cmbright instead. So for ease of use, we include:
\usepackage{cmbright}
% But if you have XeLaTeX or LuaLaTeX, use the following instead:
%\usepackage{fontspec}
%\setmainfont{Calibri}

\usepackage[english]{babel}

\sender{Prof. Walter Daems}{Senior Lecturer}
\facultyacronym{TI}
\unit{CoSys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}{uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}

\to{Prof. B. Bonette}
\toorganization{Mumford University}
\toaddress{
  450 Morning Mall\\
  Mumford, DX 94305-2004\\
  USA}

\date{January 3, 2016}
\subject{Congratulations for online video lectures}

\begin{document}
  \maketitle

  \opening{Dear Prof. Bonette,}

  I'd like to congratulate you and the other professors of your
  university on the very instructive video lectures
  provided by your University. They are valued very
  highly.
```

You inspired many a professor at our university to provide more technical content beyond classical paper courses. Based on your inspiring lectures, some students desire to candidate themselves for taking an internship at your university. You can find their details enclosed.

Below, you can find a few more paragraphs to illustrate that this class can generate multipage letters.

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Sed ut perspiciatis unde omnis iste natus error sit voluptatem accusantium doloremque laudantium, totam rem aperiam, eaque ipsa quae ab illo inventore veritatis et quasi architecto beatae vitae dicta sunt explicabo. Nemo enim ipsam voluptatem quia voluptas sit aspernatur aut odit aut fugit, sed quia consequuntur magni dolores eos qui ratione voluptatem sequi nesciunt. Neque porro quisquam est, qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit, sed quia non numquam eius modi tempora incidunt ut labore et dolore magnam aliquam quaerat voluptatem. Ut enim ad minima veniam, quis nostrum exercitationem ullam corporis suscipit laboriosam, nisi ut aliquid ex ea commodi consequatur? Quis autem vel eum iure reprehenderit qui in ea voluptate velit esse quam nihil molestiae consequatur, vel illum qui dolorem eum fugiat quo voluptas nulla pariatur?

At vero eos et accusamus et iusto odio dignissimos ducimus qui blanditiis praesentium voluptatum deleniti atque corrupti quos dolores et quas molestias excepturi sint occaecati cupiditate non provident, similique sunt in culpa qui officia deserunt mollitia animi, id est laborum et dolorum fuga. Et harum quidem rerum facilis est et expedita distinctio. Nam libero tempore, cum soluta nobis est eligendi optio cumque nihil impedit quo minus id quod maxime placeat facere possimus, omnis voluptas assumenda est, omnis dolor repellendus. Temporibus autem quibusdam et aut officiis debitis aut rerum necessitatibus saepe eveniet ut et voluptates repudiandae sint et molestiae non recusandae. Itaque earum rerum hic tenetur a sapiente delectus, ut aut reiciendis voluptatibus maiores alias consequatur aut perferendis doloribus asperiores repellat.

```
\closing{Kind regards,}
% you might want to insert a signature picture or text:
% \signature{\includegraphics{signature.jpg}}
\carboncopy{Prof. S. Mariotte, Mumford University}
```

```

\enclosed{
  \begin{enumerate}
    \item list of course numbers that are most frequently viewed at
      our university (1pp)
    \item a list of students desiring to take an internship at
      Mumford University (2pp)
  \end{enumerate}
}
\end{document}
</le-example>

```

Example with configuration file

Probably, one has to write many letters. The sender details will be most certainly valid for many an occasion. Therefore, you might want to consider putting this default setup in a configuration file, e.g. `uantwerpenletter.cfg`:

```

<*le-cfg>
% configuration file for uantwerpenletter class
\usepackage{fontspec} % XeLaTeX/LuaTeX specific, replace by e.g.
\setmainfont{Calibri} % \usepackage{cmbright}
\sender{Prof. Walter Daems}{Senior Lecturer}
\facultyacronym{TI}
\unit{CoSys-Lab}
\address{
  Campus Groenenborger\\
  Groenenborgerlaan 171\\
  B-2020 Antwerpen\\
  BELGIUM}
\email{walter.daems}{uantwerpen.be}
\phone{+32 3 265 98 43}
\mobile{+32 499 355 115}
\returnaddress{FTI - U.301 -- Groenenborgerlaan 171, 2020 Antwerpen, BELGIUM}
</le-cfg>

```

The file can then be loaded in the preamble of your letter:

```
\input{uantwerpenletter.cfg}
```

After loading this configuration file, you may override some elements if this is appropriate.

You may also consider using multiple configuration files in case you have multiple roles in the university. Just make sure they are on your \LaTeX search path.

4.4.4 uantwerpenexam

Below you can find two examples:

- A single column layout (single language) exam
- A double column layout (English-Dutch) exam

If you require more language combinations, ask the author to implement this.

Single column

```
<*ex-example1>
\documentclass[a4paper,10pt]{uantwerpenexam}
\usepackage{newpxtext} % demonstration of some fine font packages
\usepackage{newpxmath}
\usepackage{enumitem}
\usepackage[dutch]{babel} % last language loaded will
                           % determine logo version (change to
                           % [dutch] for a monolingual version)
\course{19876FTIDUM}{5-Bistrologie}
\author{Walter Daems}
\facultyacronym{TI}
\programme{BA}{IW}{EI}
\academicyear{2017-2018}
\exampart{Schriftelijk Examen}
\examgroupnumber{1 (eerste examenkans-inhaal)}
\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}
\rooms{G.U.025}
\extrainfo{
  Belangrijke informatie:\\par
  Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
  op dit examen.
  Toch wil ik vooraf nog een aantal regels duidelijk stellen:
  \begin{enumerate}
  \item Mogen op je tafeltje aanwezig zijn:
    (1) schrijfgerief, los d.w.z. \emph{niet} in een pennenzak (geen
    papier; er zit examenpapier bij de opgaven),
    (2) je rekenmachine (zonder alfanumerieke data en zonder
    geheugenkaarten),
    (3) het formularium.
  \item Volledig \emph{verboden te gebruiken}: alle apparatuur met
    geheugen- of communicatiefunctie zoals GSM, smartphone,
    smartwatch, muziekspeler, \ldots
    Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
```

```

leg hem bij je tas.
\item Schrijf je naam op het titelblad van de opgave in het daartoe
voorziene vak. Op de andere bladen schrijf je je naam
\emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
te identificeren.
\item Neem je tijd om \emph{alle vragen schriftelijk te
beantwoorden}. Het puntengewicht van een vraag is bovenaan de vraag
op de opgavebladen vermeld. Wees volledig in je antwoord, maar ter
zake. Houd rekening met de beschikbare tijd.
\item Op het einde van het examen geef je \emph{alle} bladen weer af
aan de aanwezige docent.
\end{enumerate}
Succes!
}
\studentnr{127}
\begin{document}
\maketitle
\question{[VLATOP-BISTRO]}
\questionweight{3}

Geef de eerste vijf laureaten van de VLATOP-bistro
competitie.

\question{[BECHAMEL]}
\questionweight{7}

Welk van de onderstaande ingredi\''enten hoort niet thuis in
een b\'echamel saus:
\mc{Melk}
\mc{Boter}
\mc{Bloem}
\mc{Eieren}
\mc{Suiker}

\insertsolutionspagepartial{22}

\insertsolutionspage{}
\clearpage

\question{[BISTROCULTURE-1]}
\questionweight{10}

\begin{enumerate}[label=\alph*)]
\item Bespreek de evolutie van de Noord-Europese bistrocultuur
gedurende de laatste vijftig jaar.
\item Breng dit in relatie tot de
opkomst van de georganiseerde recensies zoals die van Michelin en
Gault-Millau.
\end{enumerate}

```

```

\insertsolutionspagepartial{25}
\foreach \i in {1,2,3} {
  \insertsolutionspage{}
}
\foreach \i in {1,2} {
  \insertsolutionspage{Kladpapier}
}
\end{document}
</ex-example1>

```

Two columns

```

<*ex-example2>
\documentclass[a4paper,10pt]{uantwerpenexam}
\usepackage{newpxtext} % demonstration of some fine font packages
\usepackage{newpxmath}
\usepackage{enumitem}
\usepackage[dutch,english]{babel} % last language loaded will
                                   % determine logo version (change to
                                   % [dutch] for a monolingual version)

\course{19876FTIDUM}{5-Bistrology}
\author{Walter Daems}
\facultyacronym{TI}
\programme{BA}{IW}{EI}
\academicyear{2017-2018}
\exampart{Written Exam}
\examgroupnumber{1 (eerste examenkans-inhaal)}
\examdate{2018-01-29}
\examlength{4h}
\tstart{08h30}
\tend{12h30}
\rooms{G.U.025}
\extrainfo{
  \engdut{
    Important information:\\\par
    The Education and Examination Regulations (EER) hold for this
    examination in full.
    However, before starting, I'd like to set some rules straight:
    \begin{enumerate}
      \item \emph{Can be used:} (1) writing gear (\emph{not} in a pencil
        case); you don't need paper; there's plenty of paper in your exam
        copy;
        (2) your calculator (without alphanumerical data and without memory
        cards); (3) the formula collection.
      \item \emph{May not be used:} all equipment with memory or
        communications facilities, like cell phones, smart phones, smart
        watches, music players, \ldots
        Your bag must be put in the front of the room. Put your coat on the

```



```

    hallstand or next to your bag.
\item Write your name on the title page. Don't write your name on
    the subsequent pages. Your copy has a unique number to identify it
    as yours.
\item Take your time to \emph{answer all questions in writing}. The
    point weights are listed above every question. Be complete in your
    answer, but stick to the point. Take into account the available time.
\item Hand in \emph{all} papers to the staff member on duty, at the
    end of the examination.
\end{enumerate}
Success!
}
{
    Belangrijke informatie:\\par
    Het volledige Onderwijs- en Examenreglement (OER) is van toepassing
    op dit examen.
    Toch wil ik vooraf nog een aantal regels duidelijk stellen:
    \begin{enumerate}
\item Mogen op je tafeltje aanwezig zijn:
        (1) schrijfgierief, los d.w.z. \emph{niet} in een pennenzak (geen
            papier; er zit examenpapier bij de opgaven),
        (2) je rekenmachine (zonder alfanumerieke data en zonder
            geheugenkaarten),
        (3) het formularium.
\item Volledig \emph{verboden te gebruiken}: alle apparatuur met
            geheugen- of communicatiefunctie zoals GSM, smartphone,
            smartwatch, muziekspeler, \ldots
            Je tas staat vooraan in het lokaal. Hang je jas aan de kapstok of
            leg hem bij je tas.
\item Schrijf je naam op het titelblad van de opgave in het daartoe
            voorziene vak. Op de andere bladen schrijf je je naam
            \emph{niet}. Je examenopgave heeft een uniek nummer dat toelaat het
            te identificeren.
\item Neem je tijd om \emph{alle vragen schriftelijk te}
            beantwoorden}. Het puntengewicht van een vraag is bovenaan de vraag
            op de opgavebladen vermeld. Wees volledig in je antwoord, maar ter
            zake. Houd rekening met de beschikbare tijd.
\item Op het einde van het examen geef je \emph{alle} bladen weer af
            aan de aanwezige docent.
\end{enumerate}
Succes!
}
}

\studentnr{29}
\begin{document}
\maketitle
\question{[VLATOP-BISTRO]}
\questionweight{3}

```

```

\engdut{
  Write down the first five laureates of the VALTOP-bistro competition.
}
{
  Geef de eerste vijf laureaten van de VLATOP-bistro
  competitie.
}

\question{[BECHAMEL]}
\questionweight{7}

\engdut{
  Which of the ingredients below does not belong in a b\'echamel
  sauce:
}
{
  Welk van de onderstaande ingrediënten hoort niet thuis in
  een b\'echamel saus:
}
\engdutm{Milk}{Melk}
\engdutm{Butter}{Boter}
\engdutm{Flower}{Bloem}
\engdutm{Eggs}{Eieren}
\engdutm{Sugar}{Suiker}

\insertsolutionspagepartial{20}

\insertsolutionspage{}
\clearpage

\question{[BISTROCULTURE-1]}
\questionweight{10}

\engdut{
  \begin{enumerate}[label=\alph*]
    \item Discuss the evolution of the Northern European bistro culture during
    the latest fifty years.
    \item Relate this to the rise of organized reviews
    like the ones of Michelin and Gault-Millau.
  \end{enumerate}
}
{
  \begin{enumerate}[label=\alph*]
    \item Bespreek de evolutie van de Noord-Europese bistrocultuur
    gedurende de laatste vijftig jaar.
    \item Breng dit in relatie tot de
    opkomst van de georganiseerde recensies zoals die van Michelin en
    Gault-Millau.
  \end{enumerate}
}

```

```

\insertsolutionspagepartial{22.5}
\foreach \i in {1,2,3} {
  \insertsolutionspage{}
}
\foreach \i in {1,2} {
  \insertsolutionspage{Kladpapier}
}
\end{document}
</ex-example2>

```

5 Implementation

5.1 Class inheritance

For convenience, we'll derive from the standard L^AT_EX book, letter and article class.

Before loading the class, we provide the extra options.

```

1 <*ct>
2 \newif\if@copyright
3 \DeclareOption{copyright}{\@copyrighttrue}
4 \newif\if@qr
5 \DeclareOption{qr}{\@qrtrue}
6 </ct>

7 <*ct | mt>
8 \newif\if@titlepagenoartwork
9 \DeclareOption{titlepagenoartwork}{\@titlepagenoartworktrue}
10 \newif\if@titlepagetableonly
11 \DeclareOption{titlepagetableonly}{\@titlepagetableonlytrue}
12 </ct | mt>
13 <*ct | mt | le>
14 \newif\if@filled
15 \DeclareOption{filled}{\@filledtrue}
16 </ct | mt | le>
17 <*ex>
18 \newif\if@examiner
19 \DeclareOption{examiner}{\@examinertrue}
20 </ex>

```

We execute some standard options: We load the book class for course texts and master theses.

```

21 <*ct | mt>
22 \ExecuteOptions{a4paper,11pt,final,oneside,openright}

```

```

23 \ProcessOptions
24 \LoadClassWithOptions{book}
25 </ct | mt>
26 % We load the |letter| class for letters
27 <*le>
28 \ExecuteOptions{a4paper,10pt,final,oneside,openright}
29 \ProcessOptions
30 \LoadClassWithOptions{letter}
31 \newcommand\tat{\makeatletter @\makeatother}
32 \newcommand\tbs{\textbackslash}
33 </le>
34 % We load the |article| class for exams
35 <*ex>
36 \ExecuteOptions{a4paper,twoside,10pt}
37 \ProcessOptions
38 \LoadClassWithOptions{article}
39 </ex>

```

5.2 Modern typesetting

Let's force some modern typesetting without paragraph indentation and with a decent paragraph spacing.

```

40 <*ct | mt | le | ex>
41 \setlength{\parindent}{0pt}
42 \addtolength{\parskip}{0.75\baselineskip}
43 \setcounter{secnumdepth}{3}
44 </ct | mt | le | ex>

```

5.3 Auxiliary packages

Reinventing the wheel is a waste of time, let's preload some appropriate auxiliary packages that have proven their value.

5.3.1 Geometry

Let's reduce the margins to 1 inch each.

```

45 <*ct | mt | ex>
46 \RequirePackage[top=1in, bottom=1in, left=1in, right=1in]{geometry}
47 </ct | mt | ex>
48 <*le>
49 \RequirePackage[top=1in, bottom=1in, left=1.34in, right=1in]{geometry}
50 \RequirePackage[normalem]{ulem}
51 \RequirePackage{atbegshi}
52 </le>

```

5.3.2 Font packages

Note that the use of `cmbright` is no longer imposed (as of v1.3). Using a good font is now up to the user. The packages `'newpxtext/newpxmath'` and `'cmbright'` are highly recommended. For writing letters, `'Calibri'` is the official font of the University of Antwerp.

```
53 <*ct | mt | le>
54 % no more font code
55 </ct | mt | le>
```

5.3.3 Boilerplate packages

Some boilerplate packages and an empty macro to test against (using `\ifx`)

```
56 <*ct | mt | le | ex>
57 \RequirePackage{etoolbox}
58 \RequirePackage{ifthen}
59 \RequirePackage{ifmtarg}
60 \IfFileExists{shellesc.sty}{\RequirePackage{shellesc}}{}
61 \newcommand{\@emptymacro}{}
62 </ct | mt | le | ex>
```

5.3.4 Graphics packages

Graphics packages that are required for the title page, but may come in handy for regular use as well.

Some packages for `coursetext` and `masterthesis`:

```
63 <*ct | mt | le | ex>
64 \RequirePackage{graphicx}
65 \RequirePackage{color}
66 \RequirePackage{tikz}
67 \RequirePackage{eso-pic}
68 </ct | mt | le | ex>
69 <*ct>
70 \if@copyright
71 \RequirePackage[firstpage=false,contents={Copyright University of Antwerp, All Rights Reserved}]
72 \fi
73 </ct>
```

In `uantwerpencoursetext` we also want to generate a qr code. Therefore we load the `pst-barcode` and `auto-pst-pdf` package. In this case you must enable `'write18'` or `'shell-escape'` for your \LaTeX compiler. Check your documentation on how to do so!

```
74 <*ct>
```

```

75 \if@qr
76 \RequirePackage{auto-pst-pdf}
77 \RequirePackage{pst-barcode}
78 \fi
79 \</ct>

```

5.3.5 Header/Footer

The de-facto standard for headers and footers:

```

80 <*ct | mt | le | ex>
81 \RequirePackage{fancyhdr}
82 </ct | mt | le | ex>

```

5.4 Colors

```

83 <*ct | mt | le | ex>
84 \definecolor{uacorpbord}{cmyk}{0.00,1.00,0.60,0.37}
85 \definecolor{uacorpblue}{cmyk}{1.00,0.25,0.00,0.50}
86 \definecolor{uacorpplightblue}{cmyk}{1.00,0.00,0.08,0.13}
87 \definecolor{uacorporange}{cmyk}{0.00,0.32,1.00,0.09}
88 \definecolor{uaftifresh}{cmyk}{0.34,1.00,0.00,0.00}
89 \definecolor{uaftisober}{cmyk}{0.10,1.00,0.00,0.49}
90 \definecolor{lightgray}{cmyk}{0.00,0.00,0.00,0.05}
91 \definecolor{watermark}{cmyk}{0.00,0.00,0.00,0.05}
92 </ct | mt | le | ex>

```

5.5 Babel provisions

```

93 <*ct | mt | le | ex>
94 \newcommand{\uaname}{University of Antwerp}
95 \newcommand{\logoname}{UA_HOR_ENG_CMYK}
96 \newcommand{\footername}{4E_PMS302_BR_ENG_RGB}
97 \newcommand{\orname}{of}
98 \newcommand{\domainname}{uantwerp.be}
99 \newcommand{\datename}{Date}
100 \newcommand{\subjectname}{Subject}
101 \newcommand{\academicyearname}{Academic year}
102 \newcommand{\masterthesisname}{Master's thesis}
103 \newcommand{\promotorsname}{Promoters}
104 \newcommand{\thesisname}{Thesis to obtain the degree of}
105 \newcommand{\@faculty}{< Specify faculty using \tbs{}facultyacronym\{ABC\} >}
106 \newcommand{\faccpg}{
107   \renewcommand{\@faculty}{Centre Pieter Gillis}}
108 \newcommand{\facfbd}{
109   \renewcommand{\@faculty}{
110     Faculty of Pharmaceutical, Biomedical and Veterinary Sciences}}
111 \newcommand{\facggw}{

```

```

112 \renewcommand\@faculty{Faculty of Medicine and Health Sciences}}
113 \newcommand{\insiob}{
114 \renewcommand\@faculty{Insitute of Development Policy}}
115 \newcommand{\insoiw}{
116 \renewcommand\@faculty{Institute of Educations and Information Sciences}}
117 \newcommand{\asoe}{
118 \renewcommand\@faculty{Antwerp School of Education}}
119 \newcommand{\faclw}{
120 \renewcommand\@faculty{Faculty of Arts}}
121 \newcommand{\facow}{
122 \renewcommand\@faculty{Faculty of Design Sciences}}
123 \newcommand{\facsw}{
124 \renewcommand\@faculty{Faculty of Social Sciences}}
125 \newcommand{\facrec}{
126 \renewcommand\@faculty{Faculty of Law}}
127 \newcommand{\factew}{
128 \renewcommand\@faculty{Faculty of Applied Economics}}
129 \newcommand{\facti}{
130 \renewcommand\@faculty{Faculty of Applied Engineering}}
131 \newcommand{\facwet}{
132 \renewcommand\@faculty{Faculty of Science}}
133 \newcommand{\weightname}{Weight}
134 \AtBeginDocument{
135 \ifpackageloaded{babel}{
136 \addto\captionsdutch{%
137 \renewcommand{\uaname}{Universiteit Antwerpen}
138 \renewcommand{\logoname}{UA_HOR_NED_CMYK}
139 \renewcommand{\footername}{4E_PMS302_BR_NED_RGB}
140 \renewcommand{\orname}{van}
141 \renewcommand{\domainname}{uantwerpen.be}
142 \renewcommand{\subjectname}{Onderwerp}%
143 \renewcommand{\datename}{Datum}%
144 \renewcommand{\academicyearname}{Academiejaar}
145 \renewcommand{\masterthesisname}{Masterproef}
146 \renewcommand{\promotorsname}{Promotoren}
147 \renewcommand{\thesisname}{Proefschrift tot het behalen van de
148 graad van}
149 \renewcommand{\faccpg}{
150 \renewcommand\@faculty{Centrum Pieter Gillis}}
151 \renewcommand{\facfbd}{
152 \renewcommand\@faculty{
153 Faculteit Farmaceutische, Biomedische en Diergeneeskundige
154 Wetenschappen}}
155 \renewcommand{\facggw}{
156 \renewcommand\@faculty{Faculteit Geneeskunde en
157 Gezondheidswetenschappen}}
158 \renewcommand{\insiob}{
159 \renewcommand\@faculty{Instituut voor Ontwikkelingsbeleid- en
160 beheer}}
161 \renewcommand{\insoiw}{

```

```

162         \renewcommand\@faculty{Instituut voor Onderwijs- en
163         Informatiewetenschappen}}
164     \renewcommand{\asoe}{
165         \renewcommand\@faculty{Antwerp School of Education}}
166     \renewcommand{\faciw}{\renewcommand\@faculty{Faculteit
167         Letteren en Wijsbegeerte}}
168     \renewcommand{\facow}{
169         \renewcommand\@faculty{Faculteit Ontwerpwetenschappen}}
170     \renewcommand{\facsw}{
171         \renewcommand\@faculty{Faculteit Sociale Wetenschappen}}
172     \renewcommand{\facrec}{
173         \renewcommand\@faculty{Faculteit Rechten}}
174     \renewcommand{\factew}{
175         \renewcommand\@faculty{Faculteit Toegepaste Economische
176         Wetenschappen}}
177     \renewcommand{\facti}{
178         \renewcommand\@faculty{Faculteit Toegepaste
179         Ingenieurswetenschappen}}
180     \renewcommand{\facwet}{
181         \renewcommand\@faculty{Faculteit Wetenschappen}}
182     \renewcommand{\weightname}{Gewicht}
183 }
184 \addto\captionsgerman{
185     \renewcommand{\uaname}{Universit\ "at Antwerpen}
186     \renewcommand{\logoname}{UA_HOR_DUI_CMYK}
187     \renewcommand{\footername}{4E_PMS302_BR_NED_RGB}
188     \renewcommand{\orname}{von}
189     \renewcommand{\domainname}{uantwerpen.be}
190     \renewcommand{\subjectname}{Betreff}%
191     \renewcommand{\datename}{Datum}%
192     \renewcommand{\academicyearname}{Akademisches Jahr}
193     \renewcommand{\masterthesisname}{Masterdissertation}
194     \renewcommand{\promotorsname}{Veranstalter}
195     \renewcommand{\thesisname}{Dissertation zur Erreichung des
196     Grades der}
197     \renewcommand{\faccpg}{
198         \renewcommand\@faculty{Centrum Pieter Gillis}}
199     \renewcommand{\facfb}{
200         \renewcommand\@faculty{
201             Faculteit Farmaceutische, Biomedische en Diergeneeskundige
202             Wetenschappen}}
203     \renewcommand{\facggw}{
204         \renewcommand\@faculty{Faculteit Geneeskunde en
205         Gezondheidswetenschappen}}
206     \renewcommand{\insiob}{
207         \renewcommand\@faculty{Instituut voor Ontwikkelingsbeleid- en
208         beheer}}
209     \renewcommand{\insoiw}{
210         \renewcommand\@faculty{Instituut voor Onderwijs- en
211         Informatiewetenschappen}}

```



```

212 \renewcommand{\asoe}{
213   \renewcommand{\@faculty}{Antwerp School of Education}}
214 \renewcommand{\faclw}{\renewcommand{\@faculty}{Faculteit
215   Letteren en Wijsbegeerte}}
216 \renewcommand{\facow}{
217   \renewcommand{\@faculty}{Faculteit Ontwerpwetenschappen}}
218 \renewcommand{\facsw}{
219   \renewcommand{\@faculty}{Faculteit Sociale Wetenschappen}}
220 \renewcommand{\facrec}{
221   \renewcommand{\@faculty}{Faculteit Rechten}}
222 \renewcommand{\factew}{
223   \renewcommand{\@faculty}{Faculteit Toegepaste Economische
224   Wetenschappen}}
225 \renewcommand{\facti}{
226   \renewcommand{\@faculty}{Faculteit Toegepaste
227   Ingenieurswetenschappen}}
228 \renewcommand{\facwet}{
229   \renewcommand{\@faculty}{Faculteit Wetenschappen}}
230 \renewcommand{\weightname}{Gewicht}
231 }
232 \addto\captionsofrench{%
233   \renewcommand{\uaname}{Universit\'e d'Anvers}
234   \renewcommand{\logoname}{UA_HOR_FRA_CMYK}
235   \renewcommand{\footername}{4E_PMS302_BR_ENG_RGB}
236   \renewcommand{\orname}{de}
237   \renewcommand{\domainname}{uanvers.be}
238   \renewcommand{\subjectname}{Objet}%
239   \renewcommand{\datename}{Date}%
240   \renewcommand{\academicyearname}{Ann\'ee acad\'emique}
241   \renewcommand{\masterthesisname}{Th\'ese de master}
242   \renewcommand{\promotorsname}{Promoteurs}
243   \renewcommand{\thesisname}{Th\'ese \'a l'atteinte du degr\'e de}
244   \renewcommand{\faccpg}{
245     \renewcommand{\@faculty}{Centrum Pieter Gillis}}
246   \renewcommand{\facfb}{
247     \renewcommand{\@faculty}{
248       Faculteit Farmaceutische, Biomedische en Diergeneeskundige
249       Wetenschappen}}
250   \renewcommand{\facggw}{
251     \renewcommand{\@faculty}{Faculteit Geneeskunde en
252     Gezondheidswetenschappen}}
253   \renewcommand{\insiob}{
254     \renewcommand{\@faculty}{Instituut voor Ontwikkelingsbeleid- en
255     beheer}}
256   \renewcommand{\insoiw}{
257     \renewcommand{\@faculty}{Instituut voor Onderwijs- en
258     Informatiewetenschappen}}
259   \renewcommand{\asoe}{
260     \renewcommand{\@faculty}{Antwerp School of Education}}
261   \renewcommand{\faclw}{\renewcommand{\@faculty}{Faculteit

```

```

262         Letteren en Wijsbegeerte}}
263 \renewcommand{\facow}{
264     \renewcommand\@faculty{Faculteit Ontwerpwetenschappen}}
265 \renewcommand{\facsw}{
266     \renewcommand\@faculty{Faculteit Sociale Wetenschappen}}
267 \renewcommand{\facrec}{
268     \renewcommand\@faculty{Faculteit Rechten}}
269 \renewcommand{\factew}{
270     \renewcommand\@faculty{Faculteit Toegepaste Economische
271     Wetenschappen}}
272 \renewcommand{\facti}{
273     \renewcommand\@faculty{Faculteit Toegepaste
274     Ingenieurswetenschappen}}
275 \renewcommand{\facwet}{
276     \renewcommand\@faculty{Faculteit Wetenschappen}}
277 \renewcommand{\weightname}{Poids}
278 }
279 \addto\captionsspanish{%
280     \renewcommand{\uaname}{Universidad de Amberes}
281     \renewcommand{\logoname}{UA_HOR_SPA_CMYK}
282     \renewcommand{\footername}{4E_PMS302_BR_ENG_RGB}
283     \renewcommand{\orname}{de}
284     \renewcommand{\domainname}{uantwerp.be}
285     \renewcommand{\subjectname}{Asunto}%
286     \renewcommand{\datename}{Fecha}%
287     \renewcommand{\academicyearname}{A\~no acad\'emico}
288     \renewcommand{\masterthesisname}{Tesis de maestr\'i{i}a}
289     \renewcommand{\promotorsname}{Promotores}
290     \renewcommand{\thesisname}{Disertaci\'on a la consecuci\'on del
291     grado de}
292     \renewcommand{\faccpg}{
293         \renewcommand\@faculty{Centrum Pieter Gillis}}
294     \renewcommand{\facfbd}{
295         \renewcommand\@faculty{
296             Faculteit Farmaceutische, Biomedische en Diergeneeskundige
297             Wetenschappen}}
298     \renewcommand{\facggw}{
299         \renewcommand\@faculty{Faculteit Geneeskunde en
300             Gezondheidswetenschappen}}
301     \renewcommand{\insiob}{
302         \renewcommand\@faculty{Instituut voor Ontwikkelingsbeleid- en
303             beheer}}
304     \renewcommand{\insoiw}{
305         \renewcommand\@faculty{Instituut voor Onderwijs- en
306             Informatiewetenschappen}}
307     \renewcommand{\asoe}{
308         \renewcommand\@faculty{Antwerp School of Education}}
309     \renewcommand{\faclw}{\renewcommand\@faculty{Faculteit
310         Letteren en Wijsbegeerte}}
311     \renewcommand{\facow}{

```

```

312         \renewcommand\@faculty{Faculteit Ontwerpwetenschappen}}
313     \renewcommand{\facsw}{
314         \renewcommand\@faculty{Faculteit Sociale Wetenschappen}}
315     \renewcommand{\facrec}{
316         \renewcommand\@faculty{Faculteit Rechten}}
317     \renewcommand{\factew}{
318         \renewcommand\@faculty{Faculteit Toegepaste Economische
319             Wetenschappen}}
320     \renewcommand{\facti}{
321         \renewcommand\@faculty{Faculteit Toegepaste
322             Ingenieurswetenschappen}}
323     \renewcommand{\facwet}{
324         \renewcommand\@faculty{Faculteit Wetenschappen}}
325     \renewcommand{\weightname}{Peso}
326 }
327 }
328 {}
329 }
330 </ct | mt | le | ex>

```

5.6 Tags

`\facultyacronym` The `facultyacronym` sets the faculty acronym tag `\@facultyacronym` that is used in the header/footer information. The correct acronym also sets the faculty's name correctly.

```

331 <*ct | mt | le | ex>
332 \newcommand{\@facultyacronym}{}
333 \newcommand{\facultyacronym}[1]{
334     \renewcommand{\@facultyacronym}{#1}
335     \AtBeginDocument{
336         \ifthenelse{\equal{#1}{CPG}}{\faccpg}{
337             \ifthenelse{\equal{#1}{FBD}}{\facfbd}{
338                 \ifthenelse{\equal{#1}{GGW}}{\facggw}{
339                     \ifthenelse{\equal{#1}{IOB}}{\insioib}{
340                         \ifthenelse{\equal{#1}{IOIW}}{\insoiw}{
341                             \ifthenelse{\equal{#1}{ASoE}}{\asoe}{
342                                 \ifthenelse{\equal{#1}{LW}}{\faclw}{
343                                     \ifthenelse{\equal{#1}{OW}}{\facow}{
344                                         \ifthenelse{\equal{#1}{SW}}{\facsw}{
345                                             \ifthenelse{\equal{#1}{REC}}{\facrec}{
346                                                 \ifthenelse{\equal{#1}{TEW}}{\factew}{
347                                                     \ifthenelse{\equal{#1}{TI}}{\facti}{
348                                                         \ifthenelse{\equal{#1}{WET}}{\facwet}{
349                                         \errmessage{Error: wrong faculty acronym; choose one of CPG, FBD, GGW,
350                                             IOB, IOIW, ASoE, LW, OW, SW, REC, TEW, TI, WET}}}}}}}}}}}}}}
351     }
352 </ct | mt | le | ex>

```

`\title` The `title` tag is native to \LaTeX . It sets the `\@title` tag that will be used on the title page. However, in view of the qr trouble, we fiddle a little with it. In case the title contains accented characters, you also need to provide a qr version in full unicode (so without the traditional \LaTeX accented characters.)

```

353 <*ct>
354 \newcommand{\@qrttitle}{}
355 \renewcommand{\title}[1]{%
356   \renewcommand{\@title{#1}
357   \ifx\@qrttitle\emptymacro
358     \renewcommand{\@qrttitle{#1}
359   \fi
360 }
361 \newcommand{\qrttitle}[1]{%
362   \renewcommand{\@qrttitle{#1}
363 }
364 </ct>

```

`\subtitle` This macro sets the `\@subtitle` tag that later will be used on the title page, in the header/footer and to set the appropriate `hyperref` tag.

```

365 <*ct>
366 \newcommand{\@subtitle}{}
367 \newcommand{\@qrs subtitle}{}
368 \newcommand{\subtitle}[1]{%
369   \renewcommand{\@subtitle{#1}
370   \ifx\@qrs subtitle\emptymacro
371     \renewcommand{\@qrs subtitle{#1}
372   \fi
373 }
374 \newcommand{\qrs subtitle}[1]{%
375   \renewcommand{\@qrs subtitle{#1}
376 }
377 </ct>

```

`\shorttitle` This macro sets the `\@shorttitle` tag that later will be used in the `uantwerpenexam` class.

```

378 <*ex>
379 \newcommand{\@shorttitle}{}
380 \newcommand{\shorttitle}[1]{%
381   \renewcommand{\@shorttitle{#1}
382 }
383 </ex>

```

`\author` The `author` tag is native to \LaTeX . It sets the `\@author` tag that will be used on the title page. However, in view of the qr trouble, we fiddle a little with it for the `uantwerpcoursetext` class. In case the title contains accented characters, you

also need to provide a qr version in full unicode (so without the traditional L^AT_EX accented characters.)

```

384 <*ct>
385 \newcommand{\@qrauthor}{}
386 \renewcommand{\author}[1]{%
387   \renewcommand{\@author}{#1}
388   \ifx\@qrauthor\emptymacro
389     \renewcommand{\@qrauthor}{#1}
390   \fi
391 }
392 \newcommand{\qrauthor}[1]{%
393   \renewcommand{\@qrauthor}{#1}
394 }
395 </ct>

```

\courseversion This macro sets the \@courseversion tag that later will be used on the title page and in the header/footer.

```

396 <*ct>
397 \newcommand{\@courseversion}{}
398 \newcommand{\courseversion}[1]{\renewcommand{\@courseversion}{#1}}
399 </ct>

```

\versionyear This macro sets the \@versionyear tag that later will be used on the title page and in the copyright message.

```

400 <*ct>
401 \newcommand{\@versionyear}{}
402 \newcommand{\versionyear}[1]{\renewcommand{\@versionyear}{#1}}
403 </ct>

```

\publisher This macro sets the \@publisher tag that later will be used on the title page.

```

404 <*ct>
405 \newcommand{\@publisher}{\uaname\\
406 Cursusdienst en reprografie\\
407 Campus Groenenborger, G.U.027\\
408 Groenenborgerlaan 171\\
409 2020 Antwerpen\\
410 T +32 3 265 32 15\\
411 F + 32 3 233 32 27\\
412 E cursusdienst.cgb@uantwerpen.be}
413 \newcommand{\publisher}[1]{\renewcommand{\@publisher}{#1}}
414 </ct>

```

\publishercode This macro sets the \@publishercode tag that later will be used on the title page.

```

415 <*ct>

```

```

416 \newcommand{\@publishercode}{}
417 \newcommand{\publishercode}[1]{\renewcommand{\@publishercode}{#1}}
418 \end{ct}

```

\lecturer This macro sets many \@lecturer tags (max. 4) that later will be used on the title page. If there is only one teaching lecturer one can use the convenient shorthand without counter. In case the lecturer's name contains accented characters, you also need to provide a qr version in full unicode (so without the traditional L^AT_EX accented characters.)

```

419 \begin{ct}
420 \newcommand{\@lectureri}{}
421 \newcommand{\@lecturerii}{}
422 \newcommand{\@lectureriii}{}
423 \newcommand{\@lectureriv}{}
424 \newcommand{\@qrlectureri}{}
425 \newcommand{\@qrlecturerii}{}
426 \newcommand{\@qrlectureriii}{}
427 \newcommand{\@qrlectureriv}{}
428 \newcommand{\lecturer}[1]{
429   \renewcommand{\@lectureri}{#1}
430   \ifx\@qrlectureri\emptymacro
431     \renewcommand{\@qrlectureri}{#1}
432   \fi
433 }
434 \newcommand{\qrlecturer}[1]{
435   \renewcommand{\@qrlectureri}{#1}
436 }
437 \newcommand{\lectureri}[1]{
438   \renewcommand{\@lectureri}{#1}
439   \ifx\@qrlectureri\emptymacro
440     \renewcommand{\@qrlectureri}{#1}
441   \fi
442 }
443 \newcommand{\qrlectureri}[1]{
444   \renewcommand{\@qrlectureri}{#1}
445 }
446 \newcommand{\lecturerii}[1]{
447   \renewcommand{\@lecturerii}{#1}
448   \ifx\@qrlecturerii\emptymacro
449     \renewcommand{\@qrlecturerii}{#1}
450   \fi
451 }
452 \newcommand{\qrlecturerii}[1]{
453   \renewcommand{\@qrlecturerii}{#1}
454 }
455 \newcommand{\lectureriii}[1]{
456   \renewcommand{\@lectureriii}{#1}
457   \ifx\@qrlectureriii\emptymacro

```

```

458 \renewcommand\@qrlectureriii{#1}
459 \fi
460 }
461 \newcommand{\qrlectureriii}[1]{
462 \renewcommand\@qrlectureriii{#1}
463 }
464 \newcommand{\lectureriv}[1]{
465 \renewcommand{\@lectureriv}{#1}
466 \ifx\@qrlectureriv\@emptymacro
467 \renewcommand\@qrlectureriv{#1}
468 \fi
469 }
470 \newcommand{\qrlectureriv}[1]{
471 \renewcommand\@qrlectureriv{#1}
472 }
473 \</ct>

```

\supervisor This macro sets many \@supervisor tags (max. 4) that later will be used on the title page. If there is only one supervisor one can use the convenient shorthand without counter.

```

474 \<*mt>
475 \newcommand{\@supervisor}{ }
476 \newcommand{\@supervisorii}{ }
477 \newcommand{\@supervisoriii}{ }
478 \newcommand{\@supervisoriv}{ }
479 \newcommand{\supervisor}[1]{\renewcommand{\@supervisor}{#1}}
480 \newcommand{\supervisor}[1]{\renewcommand{\@supervisor}{#1}}
481 \newcommand{\supervisorii}[1]{\renewcommand{\@supervisorii}{#1}}
482 \newcommand{\supervisoriii}[1]{\renewcommand{\@supervisoriii}{#1}}
483 \newcommand{\supervisoriv}[1]{\renewcommand{\@supervisoriv}{#1}}
484 \</mt>

```

\programme This macro sets the \@programme tags that later will be used on the title page. The involved way of repeatedly calling the renewcommand to set the tags is required for inclusion of the data as QR data.

```

485 \<*ct | ex>
486 \newcommand{\@programmet}{ } % type
487 \newcommand{\@programmec}{ } % class
488 \newcommand{\@programmecqr}{ } % class for qr code
489 \newcommand{\@programmes}{ } % class
490 \newcommand{\@programmeq}{ } % qualifier
491 \newcommand{\programme}[3]{%
492 \ifthenelse{\equal{#1}{BA}}{%
493 {\renewcommand{\@programmet}{Bachelor of Science in de }}{%
494 \ifthenelse{\equal{#1}{MA}}{%
495 {\renewcommand{\@programmet}{Master of Science in de }}{%
496 \ifthenelse{\equal{#1}{VP}}{%

```

```

497     {\renewcommand{\@programmet}{Voorbereidingsprogramma voor Master of Science in de }}{%
498     \ifthenelse{\equal{#1}{SP}}{%
499     {\renewcommand{\@programmet}{Schakelprogramma voor Master of Science in de }}{%
500     \ifthenelse{\equal{#1}{FREE}}{%
501     {}{
502     \errmessage{Error in 1st arg of macro programme[3]: invalid
503     programme type!}}}}}%
504     %
505     \ifthenelse{\equal{#2}{IW}}{%
506     {\renewcommand{\@programmec}{industri\ "ele wetenschappen}
507     \renewcommand{\@programmecqr}{industriële wetenschappen}}{
508     \ifthenelse{\equal{#2}{}}{
509     {}{
510     \errmessage{{Error in 2nd arg of macro programme[3]: invalid
511     programme class! }}}}%
512     %
513     \ifthenelse{\equal{#3}{BK}}{%
514     {\renewcommand{\@programmeq}{bouwkunde}}{%
515     \ifthenelse{\equal{#3}{CH}}{%
516     {\renewcommand{\@programmeq}{chemie}}{%
517     \ifthenelse{\equal{#3}{BCH}}{%
518     {\renewcommand{\@programmeq}{biochemie}}{%
519     \ifthenelse{\equal{#3}{EM}}{%
520     {\renewcommand{\@programmeq}{elektromechanica}}{%
521     \ifthenelse{\equal{#3}{EI}}{%
522     {\renewcommand{\@programmeq}{elektronica-ICT}}{%
523     \ifthenelse{\equal{#3}{}}{
524     {}{%
525     \ifthenelse{\equal{#1}{FREE}}
526     {\renewcommand{\@programmeq}{#3}}{
527     \errmessage{Error in 3rd arg to macro programme[3]: invalid
528     programme qualifier}}}}}}}%
529     %
530     \ifthenelse{\equal{#2}{IW}\and\not\equal{#3}{}}
531     {\renewcommand{\@programmes}{: }}{
532     }
533     \</ct | ex)

```

\course Four the coursetext class, this macro sets many \@coursecode and \@course tags (max. 4) that later will be used on the title page. If there is only one course code one can use the convenient shorthand without counter.

```

534 \<*ct)
535 \newcommand{\@coursecodei}{ }
536 \newcommand{\@coursecodeii}{ }
537 \newcommand{\@coursecodeiii}{ }
538 \newcommand{\@coursecodeiv}{ }
539 \newcommand{\@coursei}{ }
540 \newcommand{\@courseii}{ }
541 \newcommand{\@courseiii}{ }

```



```

542 \newcommand{\@courseiv}{}
543 \newcommand{\@qrcoursei}{}
544 \newcommand{\@qrcourseii}{}
545 \newcommand{\@qrcourseiii}{}
546 \newcommand{\@qrcourseiv}{}
547 \newcommand{\course}[2]{
548   \renewcommand{\@coursecodei}{#1}
549   \renewcommand{\@coursei}{#2}
550   \ifx\@qrcoursei\emptymacro
551     \renewcommand{\@qrcoursei}{#2}
552   \fi
553 }
554 \newcommand{\qrcourse}[1]{
555   \renewcommand{\@qrcoursei}{#1}
556 }
557 \newcommand{\coursei}[2]{
558   \renewcommand{\@coursecodei}{#1}
559   \renewcommand{\@coursei}{#2}
560   \ifx\@qrcoursei\emptymacro
561     \renewcommand{\@qrcoursei}{#2}
562   \fi
563 }
564 \newcommand{\qrcoursei}[1]{
565   \renewcommand{\@qrcoursei}{#1}
566 }
567 \newcommand{\courseii}[2]{
568   \renewcommand{\@coursecodeii}{#1}
569   \renewcommand{\@courseii}{#2}
570   \ifx\@qrcourseii\emptymacro
571     \renewcommand{\@qrcourseii}{#2}
572   \fi
573 }
574 \newcommand{\qrcourseii}[1]{
575   \renewcommand{\@qrcourseii}{#1}
576 }
577 \newcommand{\courseiii}[2]{
578   \renewcommand{\@coursecodeiii}{#1}
579   \renewcommand{\@courseiii}{#2}
580   \ifx\@qrcourseiii\emptymacro
581     \renewcommand{\@qrcourseiii}{#2}
582   \fi
583 }
584 \newcommand{\qrcourseiii}[1]{
585   \renewcommand{\@qrcourseiii}{#1}
586 }
587 \newcommand{\courseiv}[2]{
588   \renewcommand{\@coursecodeiv}{#1}
589   \renewcommand{\@courseiv}{#2}
590   \ifx\@qrcourseiv\emptymacro
591     \renewcommand{\@qrcourseiv}{#2}

```

```

592 \fi
593 }
594 \newcommand{\qrcourseiv}[1]{
595 \renewcommand{\@qrcourseiv}{#1}
596 }
597 \</ct>
598 % \end{macrocode}
599 % For the |exam| class (assuming that an exam only holds for a
600 % single course), the situation is simple and we assume only a
601 % single coursecode and course name. We also don't need any of the
602 % QR stamp stuff.
603 % \begin{macrocode}
604 \<ex>
605 \newcommand{\@coursecodei}{}
606 \newcommand{\@coursei}{}
607 \newcommand{\course}[2]{
608 \renewcommand{\@coursecodei}{#1}
609 \renewcommand{\@coursei}{#2}
610 }
611 \</ex>

```

`\diploma` This macro sets the `\@diploma` tags that later will be used on the title page.

```

612 \<mt>
613 \newcommand{\@diploma}{ERROR}
614 \newcommand{\diploma}[1]{
615 \newcommand{\MoSIW}{Master of Science in de industriële wetenschappen}
616 \newcommand{\MoSTEW}{Master of Science in de toegepaste economische wetenschappen}
617 \renewcommand{\@diploma}{
618 \ifthenelse{\equal{#1}{MA-IW-BK}}{
619 \MoSIW: bouwkunde}{
620 \ifthenelse{\equal{#1}{MA-IW-BCH}}{
621 \MoSIW: biochemie}{
622 \ifthenelse{\equal{#1}{MA-IW-CH}}{
623 \MoSIW: chemie}{
624 \ifthenelse{\equal{#1}{MA-IW-EI}}{
625 \MoSIW: elektronica-ICT}{
626 \ifthenelse{\equal{#1}{MA-IW-EI-AE}}{
627 \MoSIW:\\elektronica-ICT, afstudeerrichting automotive engineering}{
628 \ifthenelse{\equal{#1}{MA-IW-EI-ICT}}{
629 \MoSIW:\\elektronica-ICT, afstudeerrichting ICT}{
630 \ifthenelse{\equal{#1}{MA-IW-EM-AE}}{
631 \MoSIW:\\elektromechanica, afstudeerrichting automotive engineering}{
632 \ifthenelse{\equal{#1}{MA-IW-EM-AU}}{
633 \MoSIW:\\elektromechanica, afstudeerrichting automatisering}{
634 \ifthenelse{\equal{#1}{MA-IW-EM-EM}}{
635 \MoSIW:\\elektromechanica, afstudeerrichting elektromechanica}{
636 \ifthenelse{\equal{#1}{MA-IW-EM-EN}}{
637 \MoSIW:\\elektromechanica, afstudeerrichting energie}{
638 \ifthenelse{\equal{#1}{MA-TEW-HI}}{

```

```

639             {\MoSTEW: handelsingenieur}{
640 \ifthenelse{\equal{#1}{MA-TEW-HIBI}}
641             {\MoSTEW:\\handelsingenieur in de beleidsinformatica}{
642 \ifthenelse{\equal{#1}{MA-TEW-EB}}
643             {\MoSTEW: economisch beleid}{
644 \ifthenelse{\equal{#1}{MA-TEW-BK}}
645             {\MoSTEW: bedrijfskunde}
646 {\errmessage{Error in argument to macro diploma: must be one of
647             MA-IW-XXX with XXX one of BCH, CH, EI, EI-AE, EI-ICT, EM-AE,
648             EM-AU, EM-EM, EM-EN, MA-TEW-YYY with YYY one of HI, HIBI, EB, BK! <>}}}}}}}}}}}}}}
649 }
650 }
651 \end{mt}

```

\defensedate This macro sets the \@defensedate tags that later will be used on the title page.

```

652 \end{mt}
653 \newcommand{\@defensedate}{ERROR}
654 \newcommand{\defensedate}[1]{\renewcommand{\@defensedate}{#1}}
655 \end{mt}

```

\defenselocation This macro sets the \@defenselocation tags that later will be used on the title page.

```

656 \end{mt}
657 \newcommand{\@defenselocation}{Antwerpen}
658 \newcommand{\defenselocation}[1]{\renewcommand{\@defenselocation}{#1}}
659 \end{mt}

```

\academicyear This macro sets the \@academicyear tag that later will be used on the title page.

```

660 \end{ct} \end{mt} \end{ex}
661 \newcommand{\@academicyear}{XXX-YYYY}
662 \newcommand{\academicyear}[1]{\renewcommand{\@academicyear}{#1}}
663 \end{ct} \end{mt} \end{ex}

```

\copyrightnotices This macro sets the \@copyrightnotices tag that later will be used on the back of the title page.

```

664 \end{ct}
665 \newcommand{\@copyrightnotices}{}
666 \newcommand{\copyrightnotices}[1]{\renewcommand{\@copyrightnotices}{#1}}
667 \end{ct}

```

\sender This macro sets the \@sender and \@senderrole tags that will be used in the letter's heading text.

```

668 \end{le}

```

```

669 \newcommand{\@sender}{< Specify sender using
670   \tbs{}sender\{name\}\{role\} >}
671 \newcommand{\@senderrole}{~}
672 \newcommand{sender}[2]{\renewcommand{\@sender}{#1}\renewcommand{\@senderrole}{#2}}
673 \le

```

\logo This macro sets the **\@logo** tag that will be used to load a graphics file with that name.

```

674 \le | ex
675 \newcommand{\@logo}{\logoname}
676 \newcommand{logo}[1]{\renewcommand{\@unit}{#1}}
677 \le | ex

```

\unit This macro sets the **\@unit** tag that will be used in the letter's heading text.

```

678 \le
679 \newcommand{\@unit}{}
680 \newcommand{unit}[1]{\renewcommand{\@unit}{#1}}
681 \le

```

\email This macro sets the **\@emailuser** and **\@emaildomain** tags that will be used in the letter's heading text. This split construction was used to overcome problems with the @ sign.

```

682 \le
683 \newcommand{\@emailuser}{}
684 \newcommand{\@emaildomain}{}
685 \newcommand{email}[2]{\renewcommand{\@emailuser}{#1}\renewcommand{\@emaildomain}{#2}}
686 \le

```

\phone This macro sets the **\@phone** tag that will be used in the letter's heading text.

```

687 \le
688 \newcommand{\@phone}{}
689 \newcommand{phone}[1]{\renewcommand{\@phone}{#1}}
690 \le

```

\fax This macro sets the **\@fax** tag that will be used in the letter's heading text.

```

691 \le
692 \newcommand{\@fax}{}
693 \newcommand{fax}[1]{\renewcommand{\@fax}{#1}}
694 \le

```

\mobile This macro sets the **\@mobile** tag that will be used in the letter's heading text.

```

695 \le

```

```

696 \newcommand{\@mobile}{}
697 \newcommand{\mobile}[1]{\renewcommand{\@mobile}{#1}}
698 \le

```

\returnaddress This macro sets the **\@returnaddress** tag that will be used in the letter's heading text (in the area of the envelope's window).

```

699 \le
700 \newcommand{\@returnaddress}{<specify return-address using \tbs\{single-line-
    return-address\}>}
701 \renewcommand{\returnaddress}[1]{\renewcommand{\@returnaddress}{#1}}
702 \le

```

\to This macro sets the **\@to** tag that will be used in the letter's heading text (in the area of the envelope's window).

```

703 \le
704 \newcommand{\@to}{<Specify addressee using \tbs to\{name\}>}
705 \renewcommand{\to}[1]{\renewcommand{\@to}{#1}}
706 \le

```

\toorganization This macro sets the **\@toorganization** tag that will be used in the letter's heading text (in the area of the envelope's window).

```

707 \le
708 \newcommand{\@toorganization}{<Specify organization using
709   \tbs toorganization\{>}
710 \newcommand{\toorganization}[1]{\renewcommand{\@toorganization}{#1}}
711 \le

```

\toaddress This macro sets the **\@toaddress** tag that will be used in the letter's heading text (in the area of the envelope's window).

```

712 \le
713 \newcommand{\@toaddress}{<Specify (multiline) destination address\\using \tbs toaddress\{>}
714 \newcommand{\toaddress}[1]{\renewcommand{\@toaddress}{#1}}
715 \le

```

\subject This macro sets the **\@subject** tag that will be used in the letter's heading text.

```

716 \le
717 \newcommand{\@subject}{-}
718 \newcommand*{\subject}[1]{\renewcommand{\@subject}{#1}}
719 \le

```

\opening This macro is much a do about nothing, but I prefer to do it this way for historic reasons.

```

720 <*le>
721 \renewcommand*{\opening}[1]{#1}
722 </le>

```

\closing This macro sets the **\@closing** tag that will be used to finish the letter.

```

723 <*le>
724 \newcommand{\@closing}{<specify a closing formula using \tbs closing\{\}>}
725 \renewcommand*{\closing}[1]{\renewcommand{\@closing}{#1}}
726 </le>

```

\signature This macro sets the **\@signature** tag that will be used to finish the letter. By default this corresponds to a decent amount of vertical white space

```

727 <*le>
728 \newcommand{\@signature}{\vspace*{8ex}}
729 \renewcommand*{\signature}[1]{\renewcommand{\@signature}{#1}}
730 </le>

```

\carboncopy This macro will set the **\@carboncopy** tag that will be used in the trailer of the letter.

```

731 <*le>
732 \newcommand{\@carboncopy}{}
733 \newcommand{\carboncopy}[1]{\renewcommand{\@carboncopy}{#1}}
734 </le>

```

\enclosed This macro will set the **\@enclosed** tag that will be used in the trailer of the letter.

```

735 <*le>
736 \newcommand{\@enclosed}{}
737 \newcommand{\enclosed}[1]{\renewcommand{\@enclosed}{#1}}
738 </le>

```

\address This macro will set the **\@address** tag that will be used in the letter's heading text (in the area of the envelope's window).

```

739 <*le>
740 \newcommand{\@address}{< Put your multi-line address here\\using
741 \tbs address\{\} >}
742 \renewcommand{\address}[1]{\renewcommand{\@address}{#1}}
743 </le>

```

\exampart This macro will set the **\@examgropunumber** tag that will be used on the exam title page.

```

744 <*ex>

```

```

745 \newcommand{\@exampart}{}
746 \newcommand{\exampart}[1]{\renewcommand{\@exampart}{#1}}
747 \end{ex}

```

\examgroupnumber This macro will set the \@examgroupnumber tag that will be used on the exam title page.

```

748 \begin{ex}
749 \newcommand{\@examgroupnumber}{}
750 \newcommand{\examgroupnumber}[1]{\renewcommand{\@examgroupnumber}{#1}}
751 \end{ex}

```

\examdate This macro will set the \@examdate tag that will be used on the exam title page.

```

752 \begin{ex}
753 \newcommand{\@examdate}{TBD}
754 \newcommand{\examdate}[1]{\renewcommand{\@examdate}{#1}}
755 \end{ex}

```

\examlength This macro will set the \@examlength tag that will be used on the exam title page.

```

756 \begin{ex}
757 \newcommand{\@examlength}{TBD}
758 \newcommand{\examlength}[1]{\renewcommand{\@examlength}{#1}}
759 \end{ex}

```

\tstart This macro will set the \@tstart tag that will be used on the exam title page.

```

760 \begin{ex}
761 \newcommand{\@tstart}{TBD}
762 \newcommand{\tstart}[1]{\renewcommand{\@tstart}{#1}}
763 \end{ex}

```

\tend This macro will set the \@tend tag that will be used on the exam title page.

```

764 \begin{ex}
765 \newcommand{\@tend}{TBD}
766 \newcommand{\tend}[1]{\renewcommand{\@tend}{#1}}
767 \end{ex}

```

\rooms This macro will set the \@rooms tag that will be used on the exam title page.

```

768 \begin{ex}
769 \newcommand{\@rooms}{TBD}
770 \newcommand{\rooms}[1]{\renewcommand{\@rooms}{#1}}
771 \end{ex}

```

`\extrainfo` This macro will set the `\@extrainfo` tag that will be used on the back of the exam title page.

```

772 <*ex>
773 \newcommand{\@extrainfo}{TBD}
774 \newcommand{\extrainfo}[1]{\renewcommand{\@extrainfo}{#1}}
775 </ex>

```

`\studentnr` This macro will set the `\@studentnr` tag that will be used in the header of the pages.

```

776 <*ex>
777 \newcommand{\@studentnr}{0}
778 \newcommand{\studentnr}[1]{\renewcommand{\@studentnr}{#1}}
779 </ex>

```

5.7 Header and Footer

The `fancyhdr` package is used to make a decent header and footer. The header and footer of the `uantwerpencoursetext` class are defined to be:

```

780 <*ct>
781 \if@twoside
782 \lhead[\thepage]{\slshape\rightmark}
783 \chead[]{}
784 \rhead[\slshape\leftmark]{\thepage}
785 \lfoot[\uaname{} -- \@facultyacronym]{\@courseversion}
786 \cfoot[]{}
787 \rfoot[]{\@title{}\@ifmtarg{\@subtitle}{}{ --- \@subtitle}}
788 \else
789 \lhead[]{\leftmark}
790 \chead[]{}
791 \rhead[]{\thepage}
792 \lfoot[]{\@courseversion}
793 \cfoot[]{\@Antwerpen--\@facultyacronym}
794 \rfoot[]{\@title{}}
795 \fi
796 </ct>

```

The header and footer of the `uantwerpenmasterthesis` class are defined to be:

```

797 <*mt>
798 \if@twoside
799 \lhead[\thepage]{\slshape\rightmark}
800 \chead[]{}
801 \rhead[\slshape\leftmark]{\thepage}
802 \lfoot[\uaname{} -- \@facultyacronym]{}
803 \cfoot[]{}
804 \rfoot[]{\@title{}}

```



```

805 \else
806   \lhead[]{\leftmark}
807   \chead[]{}
808   \rhead[]{\thepage}
809   \lfoot[]{}
810   \cfoot[] {UAntwerpen--\@facultyacronym}
811   \rfoot[] {\@title{}}
812 \fi
813 \end{mt}

```

The header and footer of the `uantwerpenletter` class are defined to be:

```

814 \begin{le}
815 \lhead[]{}
816 \chead[]{}
817 \rhead[]{}
818 \lfoot[\small\textcolor{gray}{\@date}]{\textcolor{gray}{\@date}}
819 \cfoot[]{}
820 \rfoot[\small\textcolor{gray}{\pagename~\thepage~\orname~\pageref{lastpage}}]{\small\textcolor{gray}{\@date}}
821 \end{le}

```

The header and footer of the `uantwerpenexam` class are defined to be:

```

822 \begin{ex}
823 \lhead[]{}
824 \chead[]{}
825 \if@examiner
826 \rhead[\small EXAMINER VERSION]{\small EXAMINER VERSION}
827 \AddToShipoutPicture{
828   \put(60,40){\rotatebox{60}{\textcolor{watermark}{
829     \fontfamily{phv}\fontsize{105}{130}\fontseries{m}\fontshape{n}\selectfont Examiner Vers
830   }}}
831 \else
832 \rhead[\small Student nr. \@studentnr]{\small Student nr. \@studentnr}
833 \fi
834 \lfoot[\small \@shorttitle]{\small \@shorttitle}
835 \cfoot[\small \thepage/\pageref{lastpage}]{\small \thepage/\pageref{lastpage}}
836 \rfoot[\small Groep \@examgroupnumber{} ---
837   \@academicyear]{\small Groep \@examgroupnumber{} --- \@academicyear}
838 \end{ex}

```

Some common code remains:

```

838 \begin{ct | mt}
839 \setlength{\headheight}{13.7pt}
840 \renewcommand{\headrulewidth}{1pt}
841 \renewcommand{\footrulewidth}{1pt}
842 \pagenumbering{arabic}
843 \end{ct | mt}
844 \begin{le}
845 \renewcommand{\headrulewidth}{0pt}
846 \renewcommand{\footrulewidth}{0pt}

```

```

847 </le>
848 <*ex>
849 \renewcommand{\headrulewidth}{0pt}
850 \renewcommand{\footrulewidth}{1pt}
851 </ex>

```

Remains to take care of filling

```

852 <*ct | mt | le>
853 \if@filled\else
854   \raggedright
855 \fi
856 \raggedbottom
857 \onecolumn
858 </ct | mt | le>

```

5.8 Copyright notice

`\@crnotice` This is the standard text that will be used for the `\@crnotice` tag.

```

859 <*ct>
860 \newcommand{\@crnotice}{
861   This document has been typeset using \LaTeX{} and the
862   \texttt{uantwerpencoursetext} class.\@
863   \@copyrightnotices
864
865   \@courseversion
866
867   CONFIDENTIAL AND PROPRIETARY.
868
869   \copyright{} \@versionyear{} University of Antwerp, All rights reserved.
870 }
871 </ct>

```

5.9 Title page for the masterthesis and coursetext clases

The title page is generated using the `\maketitle` command. As the book class from which we inherit already defines this command, we need to renew it.

The UAntwerpen house style works with large-radius circles. We need some math in order to calculate center points and radiuses

Header circle: the blue header-circle on top of the page. We calculate the center point and the radius based on:

- the fact that the center point is above the page's left edge;

- the distance of the intersection points at the left and right edge of the page with respect to the top of the page, X and Y respectively;
- the width of the page W .

Some simple trigonometry leads to the elevation of the center point above the top of the page Q and the radius R :

$$R = \frac{W^2 + (X - Y)^2}{2(X - Y)} \quad (1)$$

$$Q = R - X \quad (2)$$

We labeled the variables in the code below with a prefix `ua@` and a suffix `h` (from 'header'). We also took the paperheight into account (the page's coordinate system origins at the left bottom. Therefore:

```

872 <*ct | mt>
873 \pgfmathsetmacro{\ua@Wh}{\paperwidth}
874 \pgfmathsetmacro{\ua@Xh}{0.2\paperheight}
875 \pgfmathsetmacro{\ua@Yh}{0.125\paperheight}
876 \pgfmathsetmacro{\ua@XMyh}{\ua@Xh-\ua@Yh}
877 \pgfmathsetmacro{\ua@Rh}{0.5*\ua@Wh/\ua@XMyh*\ua@Wh+0.5*\ua@XMyh}
878 \pgfmathsetmacro{\ua@Qh}{\ua@Rh-\ua@Xh+\paperheight}
879 </ct | mt>

```

Bottom circle A: the bottom circle with the largest radius. We calculate the center point and the radius based on:

- the fact that the center point is at a distance of $3/5$ page width from the right page edge. We denote that distance by W ;
- the fact that the horizontal bottom tangent line of the circle is at a specific height above the bottom page edge, labeled S ;
- the distance of the intersection points at the right edge of the page with respect to the horizontal bottom tangent line of the circle, denoted as $X - Y$.

Given these definitions, almost the same equations as for the header circle hold:

$$R = \frac{W^2 + (X - Y)^2}{2(X - Y)} \quad (3)$$

$$Q = R + S \quad (4)$$

with R the circle's radius, and Q the elevation of the center point above the page's bottom.

We labeled the variables in the code below with a prefix `ua@` and a suffix `ba` (from 'bottom a'). Therefore:

```

880 <*ct | mt>
881 \pgfmathsetmacro{\ua@Wba}{0.4*\paperwidth}
882 \pgfmathsetmacro{\ua@Sba}{0.125*\paperheight}
883 \pgfmathsetmacro{\ua@XMYba}{0.02*\paperheight}
884 \pgfmathsetmacro{\ua@Rba}{0.5*\ua@Wba/\ua@XMYba*\ua@Wba+0.5*\ua@XMYba}
885 \pgfmathsetmacro{\ua@Qba}{\ua@Rba+\ua@Sba}
886 </ct | mt>

```

Bottom circle B: the bottom circle with the smallest radius. The same reasoning leads to:

```

887 <*ct | mt>
888 \pgfmathsetmacro{\ua@Wbb}{0.65*\paperwidth}
889 \pgfmathsetmacro{\ua@Sbb}{0.14*\paperheight}
890 \pgfmathsetmacro{\ua@XMYbb}{0.06*\paperheight}
891 \pgfmathsetmacro{\ua@Rbb}{0.5*\ua@Wbb/\ua@XMYbb*\ua@Wbb+0.5*\ua@XMYbb}
892 \pgfmathsetmacro{\ua@Qbb}{\ua@Rbb+\ua@Sbb}
893 </ct | mt>

```

Text alignment: The text is aligned around an imaginary vertical line around 2/5 page width distance from the left edge.

```

894 <*ct | mt>
895 \pgfmathsetmacro{\ua@ll}{0.15*\paperwidth}
896 \pgfmathsetmacro{\ua@l}{0.4*\paperwidth}
897 \pgfmathsetmacro{\ua@d}{0.1in}
898 \pgfmathsetmacro{\ua@rr}{0.85*\paperwidth}
899 </ct | mt>

```

Below, one can find the code for the title page of the `uantwerpencoursetext` class. We start with setting up some things for the (optional) QR mark.

```

900 <*ct>
901 \newcommand\sprtr{ / }
902 \newcommand\myqrdata{
903 I: Universiteit Antwerpen\string\n
904 F: \@faculty\string\n
905 P: \@programmet\ \@programmecqr\ \@programmeq\string\n
906 C: \@coursecodei\ \@qrcoursei
907 \sprtr
908 \@coursecodeii\ \@qrcourseii
909 \sprtr
910 \@coursecodeiii\ \@qrcourseiii
911 \sprtr
912 \@coursecodeiv\ \@qrcourseiv
913 \string\n
914 Y: \@academicyear\string\n
915 T: \@qrtitle\string\n

```

```

916 S: \@qrsubtitle\string\n
917 A: \@qrauthor\string\n
918 L: \@qrlectureri
919 \sprtr
920 \@qrlecturerii
921 \sprtr
922 \@qrlectureriii
923 \sprtr
924 \@qrlectureriv}
925 \newsavebox{\myqrcode}
926 \</ct>

```

\maketitle And finally, here is the \maketitle macro:

```

927 \< *ct>
928 \renewcommand\maketitle{%
929   \pagestyle{empty}
930   \if@qr
931     \savebox{\myqrcode}[2.7in][t]{
932       \begin{pspicture}(2.7in,2.7in)
933         \psbarcode{\myqrdata}{width=1.0 height=1.0 encoding=byte eclevel=M}{qrcode}
934       \end{pspicture}
935     }
936   \fi
937   \begin{titlepage}
938     \if@titlepagetableonly
939       Dit is een cursustekst van Universiteit Antwerpen.\<
940       Het titelblad dient opgemaakt te worden met de volgende gegevens:
941       \begin{center}
942         \begin{tabular}{|l|l|}
943           \hline
944           \bfseries I & Universiteit Antwerpen \< \hline
945           \bfseries F & \@faculty \< \hline
946           \bfseries P & \parbox[t]{14cm}{\@programmet
947             \@programmec\programmes \@programmeq} \< \hline
948           \bfseries C & \parbox[t]{14cm}{
949             \texttt{\@coursecodei} \@coursei\<
950             \texttt{\@coursecodeii} \@courseii\<
951             \texttt{\@coursecodeiii} \@courseiii\<
952             \texttt{\@coursecodeiv} \@courseiv} \< \hline
953           \bfseries Y & \@academicyear \< \hline
954           \bfseries T & \parbox[t]{14cm}{\@title}\< \hline
955           \bfseries S & \parbox[t]{14cm}{\@subtitle}\< \hline
956           \bfseries A & \parbox[t]{14cm}{\@author}\< \hline
957           \bfseries L & \parbox[t]{14cm}{\@lectureri\<
958                                 \@lecturerii\<
959                                 \@lectureriii\<
960                                 \@lectureriv} \< \hline
961         \end{tabular}
962       \end{center}

```

```

963 ~\\
964 Waarbij: I = instelleng, F = faculteit, P = programma, C =
965 cursusmodule, T = titel, S = subtitel, A = auteur(s), L =
966 lesgever(s)\\~\\
967 \if@qr
968 Deze informatie is ook gecodeerd in de onderstaande QR-code.\\
969 \vspace*{1cm}
970 \usebox{\myqrcode}
971 \fi
972 \else
973 \begin{tikzpicture}[remember picture,overlay]
974   \node at (current page.center) {
975     \begin{tikzpicture}[inner sep=0pt]
976       \clip (0,0) rectangle(\paperwidth,\paperheight);
977       \if@titlepagenoartwork\else
978       \filldraw [uacorpbord] (0.55\paperwidth,\ua@Qba pt) circle (\ua@Rba pt);
979       \filldraw [white] (0.35\paperwidth,\ua@Qbb pt) circle (\ua@Rbb pt);
980       \filldraw [uacorpblue] (0,\ua@Qh pt) circle (\ua@Rh pt);
981       \path
982       (0.95\paperwidth,0.1\paperheight)
983       node [anchor=north east] {
984         \includegraphics[width=0.25\paperwidth]{\logoname}};
985       \fi
986       \path
987       (\ua@l pt -\ua@d pt,0.77\paperheight)
988       node [anchor=north east, text width=0.35\paperwidth] {
989         \begin{flushright}
990           \uppercase\expandafter{\uaname}\\~\\
991           \academicyearname{} \@academicyear
992         \end{flushright}}
993       (\ua@l pt +\ua@d pt,0.65\paperheight)
994       node [anchor = north west, text width = 0.55\paperwidth] {
995         {\large \@faculty{}}\\[0.05\paperheight]
996         {\huge \bf \@title{}}\\[2ex]
997         {\Large \bf \@subtitle{}}\\[3ex]
998         {\Large \bf \@author{}}}
999       (\ua@l pt +\ua@d pt,0.45\paperheight)
1000      node [anchor = north west, text width = 0.55\paperwidth] {
1001        \@lectureri~\\
1002        \@lecturerii~\\
1003        \@lectureriii~\\
1004        \@lectureriv}
1005      (\ua@l pt +\ua@d pt,0.35\paperheight)
1006      node [anchor = north west, text width = 0.55\paperwidth] {
1007        {\bf \@programmet} \ \ \@programmec\@programmes \@programmeq}}
1008      (\ua@l pt +\ua@d pt,0.30\paperheight)
1009      node [anchor = north west, text width = 0.55\paperwidth] {
1010        \texttt{\@publishercode}~\\~\\
1011        \texttt{\@coursecodei{}} \ \@coursei~\\
1012        \texttt{\@coursecodeii{}} \ \@courseii~\\

```

```

1013         \texttt{\@coursecodeiii{}} \@courseiii-\
1014         \texttt{\@coursecodeiv{}} \@courseiv}
1015         (\ua@l pt - 2\ua@d pt, 0.368\paperheight)
1016         node [anchor = north east, text width = 0.35\paperwidth] {
1017             {\normalsize\begin{flushright}
1018                 \@publisher{
1019                     \end{flushright}}};
1020         \end{tikzpicture}
1021     };
1022 \end{tikzpicture}
1023 \fi
1024 \end{titlepage}%
1025 \clearpage
1026 \vspace*{\stretch{1}}
1027 \@crnotice
1028 \clearpage
1029 \setcounter{footnote}{0}%
1030 \global\let\thanks\relax
1031 \global\let\maketitle\relax
1032 \global\let\@thanks\@empty
1033 \global\let\title\relax
1034 \global\let\author\relax
1035 \global\let\date\relax
1036 \global\let\and\relax
1037 \pagestyle{fancy}
1038 \thispagestyle{empty}
1039 }
1040 </ct>

```

\makefinalpage Below, one can find the code for the final page of the uantwerpencoursetext class:

```

1041 <*ct>
1042 \newcommand\makefinalpage{
1043     \if@titlepagetableonly
1044     \else
1045         \cleardoublepage
1046         \thispagestyle{empty}
1047         ~% intentionally blank page
1048         \clearpage
1049         \thispagestyle{empty}
1050         \begin{tikzpicture}[remember picture,overlay]
1051             \node at (current page.center) {
1052                 \begin{tikzpicture}[inner sep=0pt]
1053                     \clip (0,0) rectangle(\paperwidth,\paperheight);
1054                     \if@titlepagenoartwork\else
1055                         \filldraw [uacorpblue] (\paperwidth,\ua@Qh pt) circle (\ua@Rh pt);
1056                     \fi
1057                     \path
1058                         (0.1\paperwidth,0.1\paperheight)

```

```

1059     node [anchor = south west, text width = 0.6\paperwidth] {
1060         CONFIDENTIAL AND PROPRIETARY\\~\\
1061
1062         \copyright{} \@versionyear{} \uaname,
1063         All rights reserved.}
1064     (0.9\paperwidth,0.1\paperwidth)
1065     node [anchor = south east] {
1066         \usebox{\myqrcode}
1067     };
1068     \end{tikzpicture}
1069 };
1070 \end{tikzpicture}
1071 \fi
1072 }
1073 </ct>

```

`\maketitle` And next, the code for the title page of the `uantwerpenmasterthesis` class:

```

1074 <*mt>
1075 \renewcommand\maketitle{%
1076     \pagestyle{empty}
1077     \begin{titlepage}
1078         \begin{tikzpicture}[remember picture,overlay]
1079             \node at (current page.center) {
1080                 \begin{tikzpicture}[inner sep=0pt]
1081                     \clip (0,0) rectangle(\paperwidth,\paperheight);
1082                     \if@titlepagenoartwork\else
1083                     \filldraw [lightgray] (0.55\paperwidth,\ua@Qba pt) circle (\ua@Rba pt);
1084                     \filldraw [white] (0.35\paperwidth,\ua@Qbb pt) circle (\ua@Rbb pt);
1085                     \filldraw [lightgray] (0,\ua@Qh pt) circle (\ua@Rh pt);
1086                     \path
1087                     (0.95\paperwidth,0.1\paperheight)
1088                     node [anchor=north east] {
1089                         \includegraphics[width=0.25\paperwidth]{\logoname}};
1090                     \fi
1091                     \path
1092                     (\ua@ll pt,0.77\paperheight)
1093                     node [anchor=north west, text width=0.7\paperwidth] {
1094                         \uppercase\expandafter{\uaname}\\~\\
1095                         \academicyearname{} \@academicyear\\~\\
1096                         {\large \@faculty{}}\\~\\
1097                         \masterthesisname{}}[0.05\paperheight]
1098                         {\Large \bf \@title{}}
1099                     (\ua@ll pt,0.55\paperheight)
1100                     node [anchor = north west, text width = 0.7\paperwidth] {
1101                         {\large \bf \@author{}}\\~\\~\\
1102                         \begin{tabular}{@{}p{2.7cm}p{10.8cm}}
1103                             \textbf{\promotorsname{}}:
1104                             & \@supervisorii \\
1105                             & \@supervisorii \\

```



```

1106          & \@supervisoriii \\
1107          & \@supervisoriv
1108      \end{tabular}
1109  }
1110      (\ua@ll pt,0.3\paperheight) node [anchor=north west, text width = 0.7\paperwidth]{%
1111          \thesisname\\
1112          \@diploma\\
1113          \@defenselocation, \@defensedate
1114      };
1115      \end{tikzpicture}
1116  };
1117      \end{tikzpicture}
1118  \end{titlepage}%
1119  \clearpage
1120  \setcounter{footnote}{0}%
1121  \global\let\thanks\relax
1122  \global\let\maketitle\relax
1123  \global\let\@thanks\@empty
1124  \global\let\title\relax
1125  \global\let\author\relax
1126  \global\let\date\relax
1127  \global\let\and\relax
1128  \pagestyle{fancy}
1129  \thispagestyle{empty}
1130 }
1131 </mt>

```

\makefinalpage Below, one can find the code for the final page of the uantwerpenmasterthesis class:

```

1132 <*mt>
1133 \newcommand\makefinalpage{
1134     \cleardoublepage
1135     \thispagestyle{empty}
1136     \begin{tikzpicture}[remember picture,overlay]
1137         \node at (current page.center) {
1138             \begin{tikzpicture}[inner sep=0pt]
1139                 \clip (0,0) rectangle(\paperwidth,\paperheight);
1140                 \if@titlepagenoartwork\else
1141                     \filldraw [lightgray] (\paperwidth,\ua@Qh pt) circle (\ua@Rh pt);
1142                 \fi
1143             \end{tikzpicture}
1144         };
1145     \end{tikzpicture}
1146 }
1147 </mt>

```

5.10 Title page for the letter class

5.10.1 Bottom cords

The graphical footer of the page is provided through PDF/PS includes in a Dutch and a non-dutch version.

5.10.2 Title Page

`\maketitle` The top of the letter is generated using the `\maketitle` command.

```
1148 <*\e>
1149 \newcommand\maketitle{%
1150   \pagestyle{fancy}
1151   \thispagestyle{empty}
1152   \begin{tikzpicture}[overlay,remember picture]
1153     \path (current page.north west) +(1.8cm,-1.2cm)
1154     node[anchor=north west] {
1155       \includegraphics[height=1.1cm]{\@logo}
1156     };
1157     \draw (current page.north west)
1158     +(1cm,-98mm) -- +(1.5cm,-98mm);
1159     % 90 x 45
1160     % pos: 20mm van kant, 15mm van onderkant
1161     \path (current page.north east) +(-100mm,-65mm)
1162     node[anchor=west,text width=80mm,align=left] {
1163       \scriptsize\textcolor{gray}{\uline{\@returnaddress}}\\*
1164       \normalsize\@to\\*
1165       \@toorganization\\*
1166       \@toaddress
1167     };
1168   \end{tikzpicture}
1169   \begin{tikzpicture}[overlay,remember picture]
1170     \path (current page.south west) +(0,-0.7cm)
1171     node[anchor=south west,inner sep=0pt, outer sep=0pt]
1172     {\includegraphics{\footername}};
1173   \end{tikzpicture}
1174   ~\\[3ex]
1175   \textcolor{uacorpblue}{\bf \@sender}
1176   \ifx\@senderrole\@emptymacro\\[1.75ex]\else \\*\@senderrole\\[1.75ex]\fi
1177   \@faculty
1178   \ifx\@unit\@emptymacro\else\\* \@unit\fi~\\[1.75ex]
1179   \@address\\[1.75ex]
1180   \ifx\@email\@emptymacro\else E \@emailuser\tat{}\@emaildomain\\fi
1181   \ifx\@phone\@emptymacro\else T \@phone\\fi
1182   \ifx\@fax\@emptymacro\else F \@fax\\fi
1183   \ifx\@mobile\@emptymacro\else M \@mobile\\fi
1184   ~\\[4ex]
```

```

1185 \begin{tikzpicture}[anchor=north west,align=left,outer sep=0,inner sep=0]
1186   \path
1187     (0,0) node { \scriptsize \strut
1188       \textcolor{gray}{\uppercase\expandafter{\datename} } }
1189     (4cm,0) node { \scriptsize \strut
1190       \textcolor{gray}{\uppercase\expandafter{\subjectname} } }
1191     (0,-2.5ex) node { \strut \@date }
1192     (4cm,-2.5ex) node[align=left] { \strut \@subject };
1193 \end{tikzpicture}~\!\! [4ex]
1194 }
1195 \</le>

```

The trailer of the page is automatically generated at the end of the document:

```

1196 \< *le>
1197 \AtEndDocument{
1198   \@closing\!\! [3ex] \@signature~\!\! [3ex]
1199   \@sender
1200   \ifx\@senderrole\@emptymacro\!\! [8ex] \else\!\! *\@senderrole\!\! [8ex] \fi
1201   \setlength{\parskip}{0em}
1202   \ifx\@carboncopy\@emptymacro \else CC: \@carboncopy\!\! [4ex] \fi
1203   \ifx\@enclosed\@emptymacro \else ENCL: \@enclosed \fi
1204   \label{lastpage}
1205 }
1206 \</le>

```

5.11 Title page for the exam class

`\maketitle` The title page of the exam class is generated using the `\maketitle` command.

```

1207 \< *ex>
1208 \renewcommand\maketitle{%
1209   \pagestyle{fancy}
1210   \AddToShipoutPicture*{%
1211     \put(0,0){%
1212       \begin{tikzpicture}[remember picture,overlay]
1213         \node at (current page.center) {
1214           \begin{tikzpicture}
1215             \clip (0,0) rectangle (21,29.7);
1216             \draw
1217               ( 3,9.7) -- ( 3,23.7)
1218               ( 0,23.7) -- (21,23.7)
1219               ( 3,19.7) -- (21,19.7)
1220               ( 3,17.7) -- (21,17.7)
1221               ( 3,15.7) -- (21,15.7)
1222               (14,11.7) -- (14,15.7)
1223               ( 3,13.7) -- (21,13.7)
1224               ( 3,11.7) -- (21,11.7)

```

```

1225      ( 0,9.7) -- (21,9.7);
1226
1227      \draw[ultra thick]
1228      ( 3,15.7) +(0,-0.5) -- +(0,0) -- +(0.5,0)
1229      ( 3,13.7) +(0,+0.5) -- +(0,0) -- +(0.5,0)
1230      (14,15.7) +(-0.5,0) -- +(0,0) +(0,-0.5) -- +(0,0) -- +(0.5,0)
1231      (14,13.7) +(-0.5,0) -- +(0,0) +(0,+0.5) -- +(0,0) -- +(0.5,0)
1232      (21,15.7) +(0,-0.5) -- +(0,0) -- +(-0.5,0)
1233      (21,13.7) +(0,+0.5) -- +(0,0) -- +(-0.5,0);
1234
1235      \path
1236      (3,25.2) node[anchor=north west] {
1237          \parbox{14cm}{
1238              \fontfamily{phv}\fontsize{12}{15}\fontseries{b}\selectfont
1239              \@faculty\
1240              \fontfamily{phv}\fontsize{11}{14}\fontseries{m}\selectfont
1241              \@programmet \@programme\
1242              \ifx\@programmeq\@emptymacro\else--- \@programmeq\fi
1243          }
1244      }
1245      (3.3,23.0) node[anchor=north west] {
1246          \parbox{14cm}{
1247              \fontfamily{phv}\fontsize{12}{15}\selectfont
1248              \@academicyear
1249          }
1250      }
1251      (3.3,21.9) node[anchor=north west] {
1252          \parbox{16cm}{
1253              \fontfamily{phv}\fontsize{18}{22}\fontseries{b}\fontshape{n}\selectfont
1254              \raggedright \@coursei --- \@exampart
1255              \fontfamily{phv}\fontsize{12}{18}\fontseries{m}\fontshape{n}\selectfont\
1256              Groep \@examgroupnumber{} \hfill \@examdate{} }
1257      }
1258      (3.3,19) node[anchor=north west] {
1259          \parbox{14cm}{
1260              \fontfamily{phv}\fontsize{12}{15}\fontseries{m}\selectfont
1261              \@coursecodei
1262          }
1263      }
1264      (3.3,17.5) node[anchor=north west] {
1265          \parbox{14cm}{
1266              \fontfamily{phv}\fontsize{12}{18}\fontseries{m}\fontshape{n}\selectfont
1267              \raggedright \ifdef{\dateenglish}{Professor(s) --- }{ }Titularis(sen):\
1268              \fontfamily{phv}\fontsize{14}{20}\fontseries{m}\fontshape{n}\selectfont
1269              \raggedright \@author{}
1270          }
1271      }
1272      (3.3,15.5) node[anchor=north west] {
1273          \parbox{10cm}{
1274              \fontfamily{phv}\fontsize{12}{15}\fontseries{m}\fontshape{n}\selectfont

```

```

1275         \raggedright \ifdef{\dateenglish}{Last name/First name
1276         --- }{}
1277         Naam/Voornaam:}
1278     }
1279     (14.3,15.5) node[anchor=north west] {
1280         \parbox{5cm}{
1281             \fontfamily{phv}\fontsize{12}{15}\fontseries{m}\fontshape{n}\selectfont
1282             \raggedright \ifdef{\dateenglish}{Registration No. --- }{}Rolnr.:}
1283     }
1284     (3.3,13.5) node[anchor=north west] {
1285         \parbox{14cm}{
1286             \fontfamily{phv}\fontsize{12}{21}\fontseries{m}\fontshape{n}\selectfont
1287             \raggedright \ifdef{\dateenglish}{Exam duration --- }{}Duur van het examen: \@e
1288         }
1289     }
1290     (14.3,13.5) node[anchor=north west] {
1291         \parbox{5cm}{
1292             \fontfamily{phv}\fontsize{12}{15}\fontseries{m}\fontshape{n}\selectfont
1293             \raggedright \ifdef{\dateenglish}{Start --- }{}Begin: \@tstart \\[1ex]
1294             \raggedright \ifdef{\dateenglish}{End --- }{}Einde~: \@tend
1295         }
1296     }
1297     (3.3,11.5) node[anchor=north west] {
1298         \parbox{14cm}{
1299             \fontfamily{phv}\fontsize{12}{21}\fontseries{m}\fontshape{n}\selectfont
1300             \raggedright \ifdef{\dateenglish}{Room --- }{}Lokaal: \@rooms
1301         }
1302     }
1303 }
1304 (2,9.5) node[anchor=north west] {
1305     \parbox{19cm}{
1306         \fontfamily{phv}\fontsize{10}{13}\fontseries{m}\fontshape{n}\selectfont
1307         \ifdef{\dateenglish}{\raggedright Extra information: read the back of this page
1308         \raggedright Extra informatie: zie achterkant
1309     }
1310 }
1311 (3,27.7) node[anchor=north west] {
1312     \includegraphics[width=7cm]{\@logo}
1313 };
1314 \end{tikzpicture}
1315 };
1316 \end{tikzpicture}
1317 }
1318 }
1319 \vspace*{15cm}
1320 \clearpage
1321 \@extrainfo
1322 \clearpage
1323 }
1324 \end{ex}

```

5.12 Auxiliary functions to typeset exams

`\question` Add a small box with the weight of the question on the current line (right aligned).

```

1325 <*ex>
1326 \newcounter{question}
1327 \setcounter{question}{0}
1328 \renewcommand\thequestion{\@arabic\c@question}
1329 \newcommand{\question}[1]{
1330   \stepcounter{question}
1331   \thequestion.~#1%
1332 }
1333 </ex>

```

`\questionweight` Add a small box with the weight of the question on the current line (right aligned).

```

1334 <*ex>
1335 \newcommand{\questionweight}[1]{%
1336   \hspace{\fill}
1337   \begin{tabular}{|c|}
1338     \hline
1339     \small \weightname: #1\\
1340     \hline
1341   \end{tabular}\\
1342 }
1343 </ex>

```

`\engdut` typesets the question in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```

1344 <*ex>
1345 \newcommand{\engdut}[2]{%
1346   \begin{tabular}{cc}%
1347     \selectlanguage{english}%
1348     \begin{minipage}[t]{0.45\textwidth}%
1349       #1
1350     \end{minipage}%
1351     &
1352     \selectlanguage{dutch}%
1353     \begin{minipage}[t]{0.45\textwidth}%
1354       #2
1355     \end{minipage}%
1356   \end{tabular}
1357   \selectlanguage{english}%
1358 }
1359 </ex>

```

`\mc` typesets a multiple choice answer candidate (monolingual, i.e. in a single column).

```

1360 <*ex>
1361 \newcommand{\mc}[1]{%
1362   \qqquad\begin{tabular}{cc}
1363     $\square$
1364     &
1365     \begin{minipage}[t]{0.8\textwidth}%
1366       #1
1367     \end{minipage}%
1368   \end{tabular}\\
1369 }
1370 </ex>

```

`\engdutm` typesets a multiple choice answer candidate in two columns, the left column taking the English variant of the question and the right column taking the Dutch variant.

```

1371 <*ex>
1372 \newcommand{\engdutm}[2]{%
1373   \begin{tabular}{cccc}
1374     $\square$
1375     &
1376     \selectlanguage{english}%
1377     \begin{minipage}[t]{0.4\textwidth}%
1378       #1
1379     \end{minipage}%
1380     &---&
1381     \selectlanguage{dutch}%
1382     \begin{minipage}[t]{0.4\textwidth}%
1383       #2
1384     \end{minipage}%
1385   \end{tabular}
1386   \selectlanguage{english}%
1387 }
1388 </ex>

```

`\insertsolutionspagepartial` fills the remainder of the page with 'fill-out' squares. as observing/controlling the current line position in L^AT_EX is not easy, one has to provide the number of centimeters below the bottom of the page, one wants to start the fill-out squares.

```

1389 <*ex>
1390 \newcommand\insertsolutionspagepartial[1]{
1391   \AddToShipoutPicture*{%
1392     \put(0,0){%
1393       \begin{tikzpicture}
1394         \clip (0,0) rectangle (21,#1);
1395 %       \draw[densely dotted, step=0.5cm,black!20] (0.999,0.990) grid (20,1.5);
1396         \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
1397         \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
1398
1399         \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,27);

```

```

1400      \draw[densely dotted, step=0.5cm,black!20] (0.999,27) grid (16,28);
1401      \draw[densely dotted, step=0.5cm,black!20] (19.499,27) grid (20,28);
1402      \draw[densely dotted, step=0.5cm,black!20] (0.99,27.999) grid
1403      (20,28.5);
1404      \draw[ultra thick] (1,#1) -- (20,#1);
1405      \end{tikzpicture}
1406    }
1407  }%
1408  \clearpage
1409  \relax
1410 }
1411 </ex>

```

`\insertsolutionspage` inserts a full solutions page, i.e. flushes the current page and inserts a full page with 'fill-out' squares. The argument allows for specifying a watermark text (e.g. 'Scrap paper').

```

1412 <*ex>
1413 \newcommand\insertsolutionspage[1]{
1414   \clearpage
1415   \AddToShipoutPicture*{%
1416     \put(0,0){%
1417       \begin{tikzpicture}
1418         \clip (0,0) rectangle (21,29.5);
1419         \draw[densely dotted, step=0.5cm,black!20] (0.999,1.499) grid (2,2.5);
1420         \draw[densely dotted, step=0.5cm,black!20] (18.999,1.499) grid (20,2.5);
1421
1422         \draw[densely dotted, step=0.5cm,black!20] (0.999,2.499) grid (20,28);
1423         \draw[densely dotted, step=0.5cm,black!20] (0.999,28) grid (16,28.5);
1424         \draw[densely dotted, step=0.5cm,black!20] (19.499,28) grid (20,28.5);
1425       \end{tikzpicture}
1426     }
1427     \put(120,150){\rotatebox{60}{\textcolor{watermark}{
1428       \fontfamily{phv}\fontsize{105}{130}\fontseries{m}\fontshape{n}\selectfont
1429       #1}
1430     }
1431   }
1432 }%
1433 ~\relax
1434 }
1435 </ex>

```

We add a lastpage label to the final page

```

1436 <*ex>
1437 \AtEndDocument{
1438   \label{lastpage}
1439 }
1440 </ex>

```



```

1441 %    \end{macrocode
1442 %
1443 % \subsection{References}
1444 %    \begin{macrocode}
1445 <*ct | mt>
1446 \IfFileExists{varioref.sty}{\RequirePackage{varioref}}{}
1447 </ct | mt>
1448 %
1449 <*ct>
1450 \IfFileExists{hyperref.sty}{
1451     \RequirePackage{hyperref}
1452     \hypersetup{
1453         backref=true,
1454         breaklinks=true,
1455         colorlinks=true,
1456         citecolor=black,
1457         filecolor=black,
1458         hyperindex=true,
1459         linkcolor=black,
1460         pageanchor=true,
1461         pagebackref=true,
1462         pagecolor=black,
1463         pdfpagemode=UseOutlines,
1464         urlcolor=black
1465     }
1466     \AtBeginDocument{
1467         \hypersetup{
1468             pdftitle={\@title},
1469             pdfsubject={\@subtitle},
1470             pdfauthor={\@author}
1471         }
1472     }
1473 }{}
1474 </ct>
1475 %
1476 %
1477 <*mt>
1478 \IfFileExists{hyperref.sty}{
1479     \RequirePackage{hyperref}
1480     \hypersetup{
1481         backref=true,
1482         breaklinks=true,
1483         colorlinks=true,
1484         citecolor=black,
1485         filecolor=black,
1486         hyperindex=true,
1487         linkcolor=black,
1488         pageanchor=true,
1489         pagebackref=true,
1490         pagecolor=black,

```

```
1491     pdfpagemode=UseOutlines,
1492     urlcolor=black
1493 }
1494 \AtBeginDocument{
1495   \hypersetup{
1496     pdftitle={\@title},
1497     pdfsubject={Master's Thesis},
1498     pdfauthor={\@author}
1499   }
1500 }
1501 }{}
1502 \end{mt}
```

Change History

v1.0	General: Consolidated uacoursetext class and uamasterthesis class 1 Added option qr 27 Added option titlepagenoartwork 27 Added option titlepagetableonly 27	General: Replaced bottom arcs in footer of letter by official PDF versions 1 Removed documentation 58
v1.1	\diploma: Fixed typo on programme's name (e-umlaut) 42 General: Small bugfixes and 'filled' option 1 Added option user documentation 5 Made raggedright conditional on option 'filled', because it can't be undone 49	v1.6 \diploma: Added diploma codes . 42 General: Added diploma codes for Faculty of Applied Economics . 1 Added diploma code documentation 9
v1.2	General: Added lmodern package and increased headheight to 13.7pt to please Fancyhdr 1 Added lmodern package to please MikTeX 29 Increased headheight to please Fancyhdr 49	v1.7 \maketitle: Embedded babel translations of keywords into title page 53, 56 General: Added babel translations of elements of master's thesis title page 1 Added babel tags of elements of master's thesis title page 30
v1.3	\makefinalpage: Changed eso-pic for tikz 55, 57 \maketitle: Changed eso-pic for tikz 56 General: Minor bugfixes, abandonment of a few packages, font freedom 1 Abandoned use of cmbright - no more font dictatorship for theses and courses 29 Added inclusion of background package 29 Changed eso-pic for tikz and background 52	v1.8 \makefinalpage: Inserted blank one but last page 55 \maketitle: Allowed for empty senderrole 58 \signature: Added signature . . . 46 General: Corrected minor typographic mistakes, added signature and solved problems with shell escape 1 Added missing packages ifmtarg and shellest 29 Allowed for empty senderrole . 59
v1.4	General: Implemented uantwerpenletter class 1 Implemented letter class 27	v1.81 General: Bugfixes for release v1.8 . 1 Apparently shellest is still missing from quite a number of installations, therefore, conditional loading 29
v1.5	\maketitle: Implemented new footer 58	v1.9 General: Added ASoE (Antwerp School of Education) 7 Integrated uantwerpenexam class into package 1 Added etoolbox for convenience reasons 29 Implemented uantwerpenexam class 27

Index

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